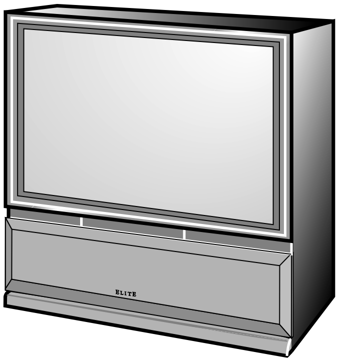
Service Manual



ORDER NO.
ARP3047

PROJECTION MONITOR RECEIVER

PRO-610HD
PRO-510HD
SD-582HD5
SD-532HD5

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model				Power Requirement	Remarks
	PRO-610HD	PRO-510HD	SD-582HD5	SD-532HD5		
KUXC/CA	○	○	○	○	AC120V	
KBXC	—	—	—	○	AC120V	

CONTENTS

1. SAFETY INFORMATION 2
2. EXPLODED VIEWS AND PARTS LIST 6
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM 22
4. PCB CONNECTION DIAGRAM 116
5. PCB PARTS LIST 176

PIONEER CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

©PIONEER CORPORATION 1999

O–ZZR NOV. 1999 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & safety code section 25249.6—Proposition 65

NOTES
(FOR CANADIAN MODEL ONLY)
Fuse symbols ⊟ (fast operating fuse) and/or ⊠ (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible ⊟ (fusible de type rapide) et/ou ⊠ (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

1.1 SAFETY PRECAUTIONS

NOTICE: Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis or picture tube.
The following precautions should be observed:

1. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away while picture tubes are handled.
   Keep picture tube away from the body while handling.
2. When service is required, even though the PROJECTION MONITOR RECEIVER an isolation transformer should be inserted between power line and the set in safety before any service is performed.
3. When replacing a chassis in the set, all the protective devices must be put back in place, such as barriers, nonmetallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
4. When service is required, observe the original lead dress.
   Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
5. Always use the manufacturer's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacture's.
   Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
6. Before returning a serviced set to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the set by the manufacturer has become defective, or inadvertently defeated during servicing.

Therefore, the following checks should be performed for the continued protection of the customer and service technician.

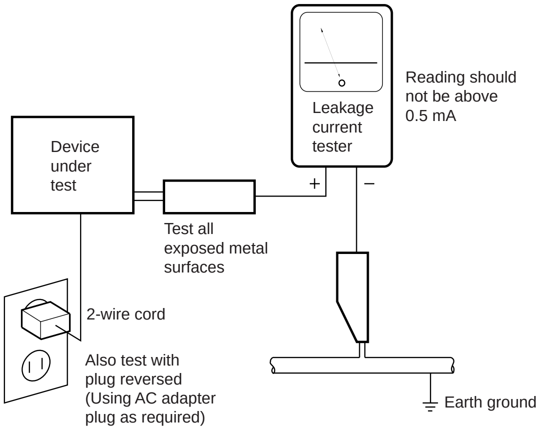
Leakage Current Cold Check

With the AC plug removed from 120V AC 60Hz source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC 500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (input/output terminals, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of 0.3MΩ and a maximum resistor reading of 5MΩ. Any resistor value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into a 120V AC 60Hz outlet (do not use an isolation transformer for this check). Turn the AC power switch on.

Using a “Leakage Current Tester (Simpson Model 229 equivalent)”, measure for current from all exposed metal parts of the cabinet (input/output terminals, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.


Device under test
Leakage current tester
Reading should not be above 0.5 mA
+
–
Test all exposed metal surfaces
2-wire cord
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE SET TO THE CUSTOMER.

High Voltage

This set is provided with a X-ray protection for clearly indicating that voltage has increased in excess of a predetermined value. Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this X-ray protection may correctly by operated.

Serviceman Warning

In the status of the black picture (video muting is being applied) when no signal is input, high voltage of this set during operation is less than 30.5kV. In case any component having some relation to the high voltage is replaced, confirm that the high voltage is lower than 30.5kV in the status of the black picture when no signal is input.

To measure H.V. use a high impedance H.V. meter.

Connect (–) to earth and (+) to the FBT anode cable connector.

X-radiation

TUBE: The primary source of X-radiation in this set is the picture tube.

For continued X-radiation protection, the replacement tube must be the same type as the original, PIONEER approved type.

The picture tube (the CRT assy R, G, B) use in this set holds complete guarantee against X-ray radiation when the X-ray is sealed (See page 4). Accordingly, when the current in flowing to the picture tube (CRT assy R, G, B) be sure to perform it by putting the tube into X-ray sealed applied state. Avoid absolutely to flow the current to the picture tube (CRT assy R, G, B) itself. Moreover, when the voltage of the high voltage circuit becomes abnormally a little higher, the picture tube radiates X-rays. Accordingly, when servicing the high voltage circuit be sure to replace as an assembly with the DEFLECTION SERVICE assy in the manner in which has been adjusted to perform normal operation.

1.2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in PIONEER set have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, X-radiation, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

1.3 CHARGED SECTION, HIGH VOLTAGE GENERATING POINT AND X-RAY PROTECTION

■ Charged section

The circuit in which the commercial AC power is used as it is without passing through the power supply transformer. If the charged section is touched, there is a risk of electric shock. In addition, the measuring equipment can be damaged if it is connected to the GND of the charged section and the GND of the non-charged section while connecting the set directly to the commercial AC power supply. In this case, be sure to connect the set via an insulated transformer and supply the current.

■ Charged section (Power supply primary side)

1. The primary side of the AC IN assy
2. AC power cord
3. The primary side of the POWER SUPPLY assy
4. AC power cord for DTV STB
   (PRO-610HD, PRO-510HD Only)

☐ : Part is the charged section.
▨ : Part is the high voltage generating points other than the charged section.

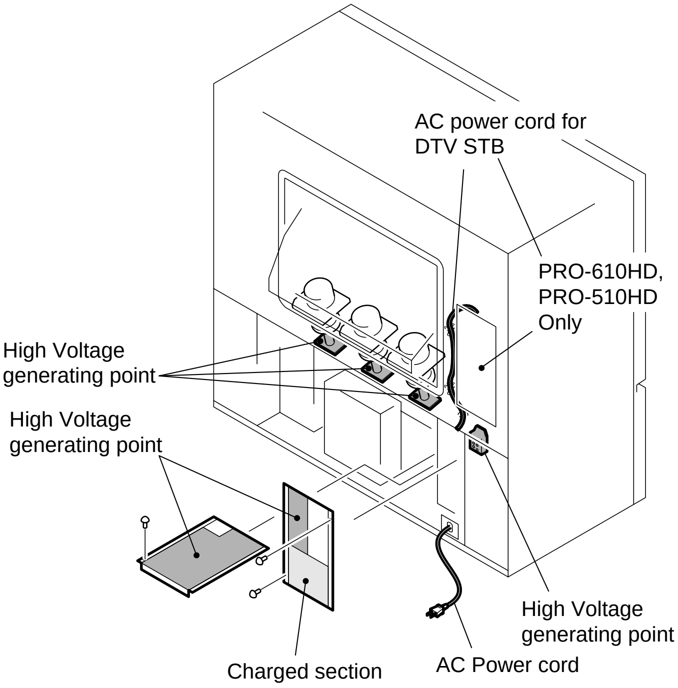

AC power cord for DTV STB
PRO-610HD, PRO-510HD Only
High Voltage generating point
High Voltage generating point
High Voltage generating point
Charged section
AC Power cord

Fig. 1 Charged section and high voltage generating point

■ High voltage generating point

The place where voltage is 100V is generated.

1.Charged seciton
DEFLECTION assy
(including FBT) (30.5kV, 1.2kV, 210V,135V)
2. POWER SUPPLY assy (135V)
3. R. CRT DRIVE assy (10.5kV, 210V)
4. G. CRT DRIVE assy (10.5kV, 210V)
5. B. CRT DRIVE assy (10.5kV, 210V)
6. CRT assy R (CRT service assy R) (30.5kV)
7. CRT assy G (CRT service assy G) (30.5kV)
8. CRT assy B (CRT service assy B) (30.5kV)
9. Focus variable resistor(VR1) (10.5kV)
10. Deflection yokes (L1, L2 and L3) Approx. (1100V at peak)

■ X-ray protection

- Regarding the parts which are relative to radiation of X-rays (There is the danger to radiate X-ray from the individual CRT assy R, G, B), there are notifications of caution in the individual schematic diagrams. Be sure to read them for safety's sake.
- The component parts for X-ray protection are as follows : When the current flows to the CRT assy R, G, B, be sure to perform it with these parts being attached. Protection from the X-ray radiation is maintained in the state in which these parts have been installed to the CRT assy. R, G, B. Accordingly, never supply current only to the CRT assy R, G, B.
  Moreover, the anode voltage of the CRT assy R, G, B should always be kept not higher than the predetermined value (in the minimum brightness and picture state when non signal input is less than 30.5kV). Be sure to drive the CRT assy R, G, B by using a completely functional DEFLECTION assy which have been adjusted completely in the combined state. (When the voltage abnormally becomes high, the X-ray protection circuit will operate.)

1. CRT assy R, G, B (Do not dismantle CRT assemblies under any circumastances)
2. Each Lens assy

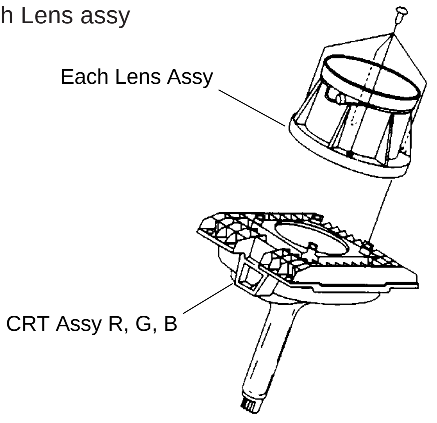
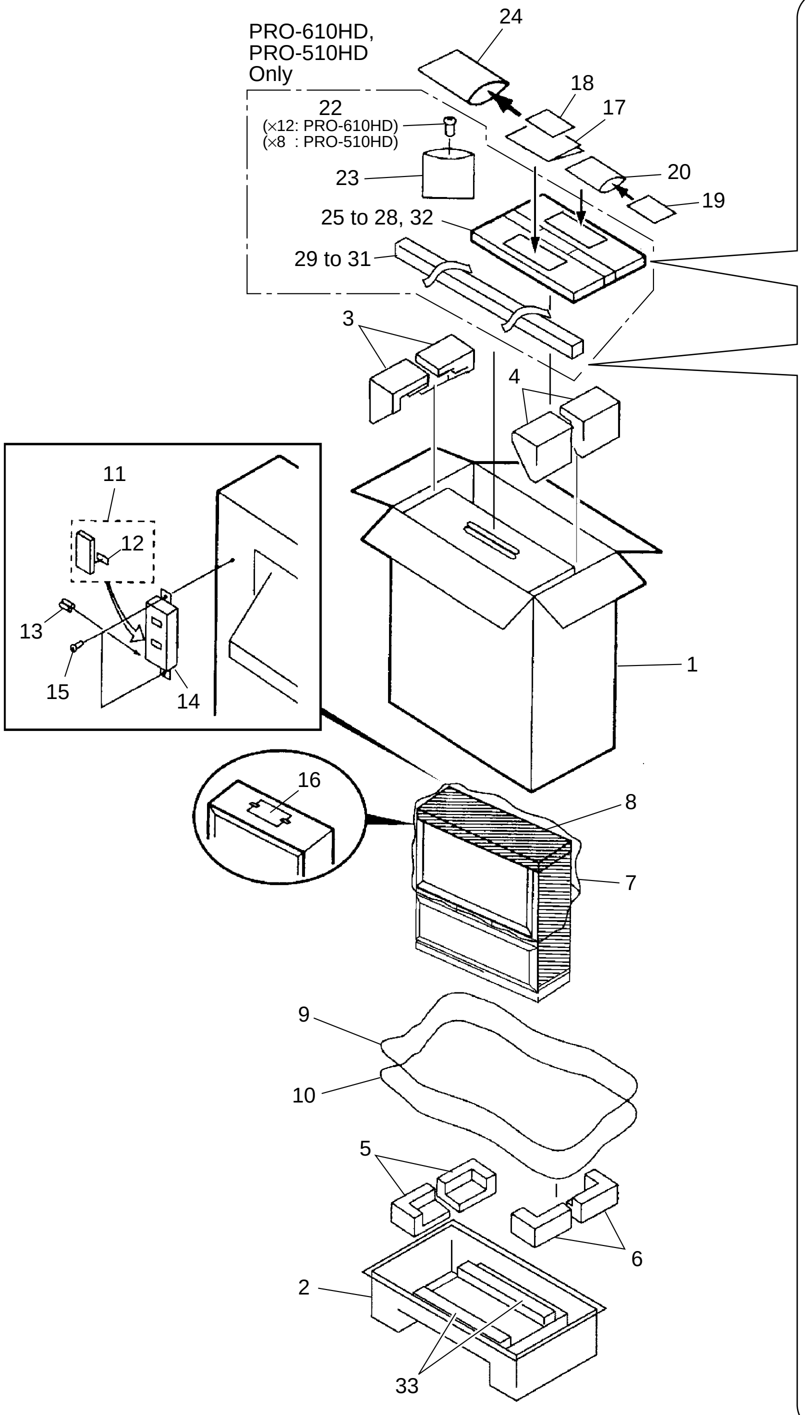


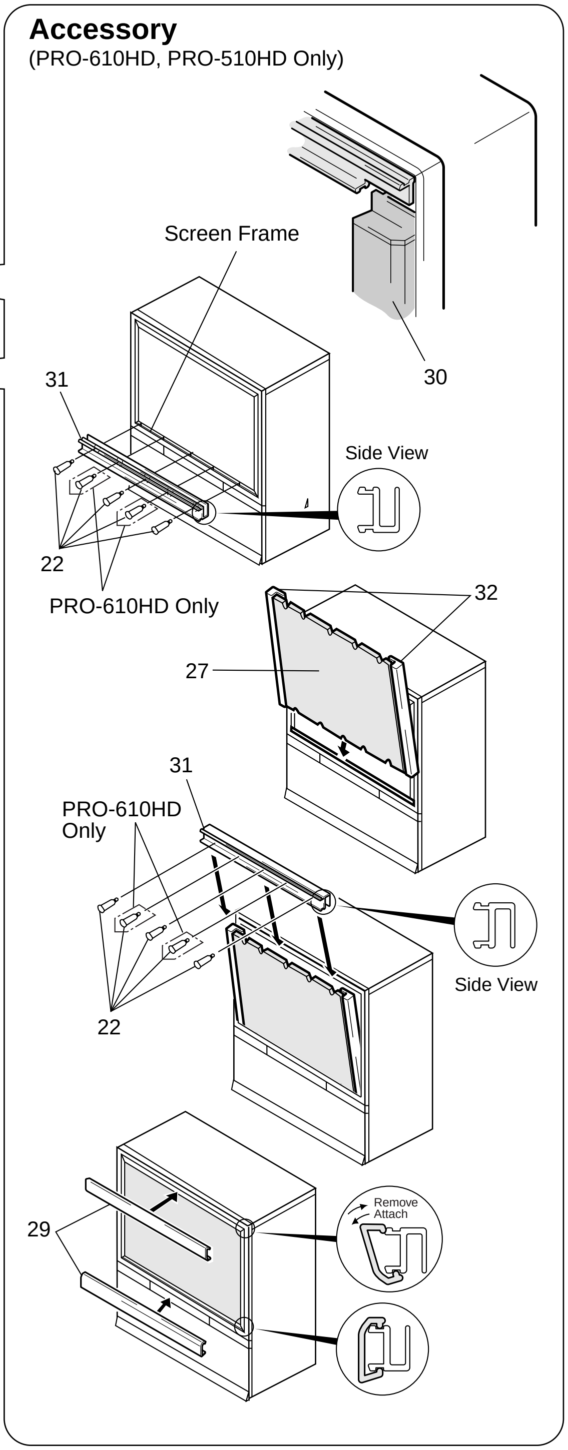
Fig. 2 Component parts for X-ray protection

2. EXPLODED VIEWS AND PARTS LIST

NOTES :
- *Parts marked by " NSP " are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by ☆ are important parts which relate in X-rays radiation. If any of these parts need to be replaced, always replace with specified parts.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING


24
PRO-610HD,
PRO-510HD
Only
18
17
22
(×12: PRO-610HD)
(×8 : PRO-510HD)
23
20
19
25 to 28, 32
29 to 31
3
4
11
12
13
15
14
1
16
8
7
9
10
5
6
2
33



Accessory

(PRO-610HD, PRO-510HD Only)

Screen Frame
31
30
Side View
22
PRO-610HD Only
32
27
31
PRO-610HD
Only
Side View
22
29
Remove
Attach

(1) PACKING PARTS LIST

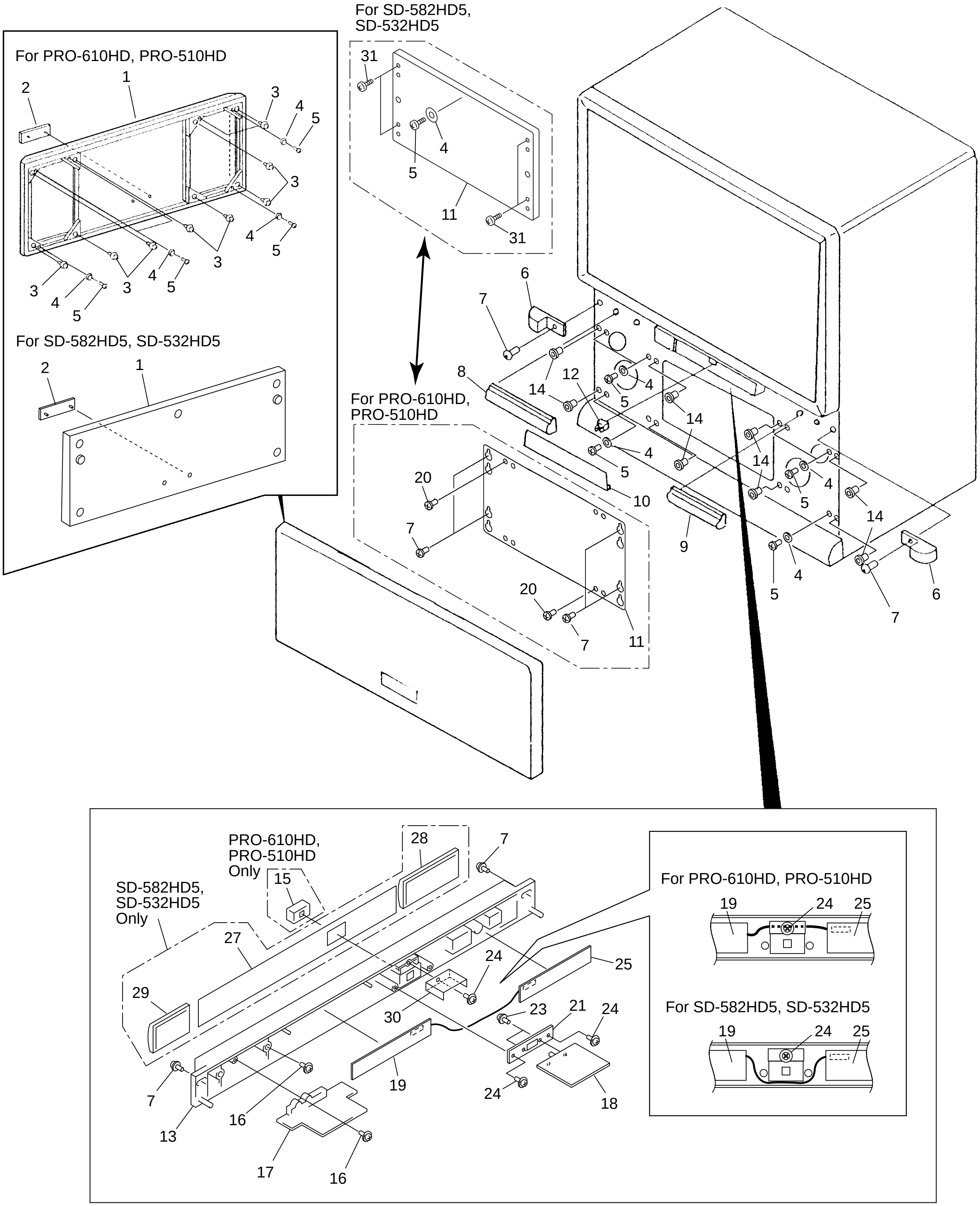
Mark	No.	Description	Part No.
	1	Upper Carton	See Contrast table (2)
	2	Under Carton	See Contrast table (2)
	3	Upper Pad L	AHA2253
	4	Upper Pad R	AHA2254
	5	Under Pad L	AHA2255
	6	Under Pad R	AHA2256
NSP	7	Vinyl Sheet Upper	See Contrast table (2)
NSP	8	Packing Sheet	See Contrast table (2)
NSP	9	Packing Sheet Under	See Contrast table (2)
	10	Vinyl Sheet Under	See Contrast table (2)
	11	Remote Control Unit	See Contrast table (2)
	12	Battery Cover	AZN2401
NSP	13	Alkarine Dry Cell Battery (LR6,AA)	AEX1018
	14	CU Packing Case	AHC1032
	15	Special Screw	ABA1239
	16	CONV. Attention Card	See Contrast table (2)
	17	Operating Instructions	See Contrast table (2)
NSP	18	Caution Card	ARM1057
NSP	19	Warranty Card	See Contrast table (2)
NSP	20	Poly Bag	AHG1285
	21	....	
	22	Special Screw (Panel Frame Attaching Screw)	See Contrast table (2)
NSP	23	Wrapper Bag	See Contrast table (2)
NSP	24	Literature Bag	AHG1222
	25	Panel Case	See Contrast table (2)
	26	....	
	27	Contrast Screen	See Contrast table (2)
	28	Acrylic Caution Card	See Contrast table (2)
	29	Frame Cover H	See Contrast table (2)
	30	Frame Cover V Assy	See Contrast table (2)
	31	Panel Frame H	See Contrast table (2)
	32	Panel Frame V	See Contrast table (2)
NSP	33	Under Cushion A	See Contrast table (2)

(2) CONTRAST TABLE

PRO-610HD, PRO-510HD, SD-582HD5 and SD-532HD5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.					Remarks
			PRO-610HD KUXC/CA	PRO-510HD KUXC/CA	SD-582HD5 KUXC/CA	SD-532HD5 KUXC/CA	SD-532HD5 KBXC	
	1	Upper Carton	AHD3045	AHD3046	AHD3049	AHD3050	AHD3050	
	2	Under Carton	AHD3047	AHD3048	AHD3047	AHD3048	AHD3048	
NSP	7	Vinyl Sheet Upper	AHG1288	AHG1095	AHG1288	AHG1095	AHG1095	
NSP	8	Packing Sheet	AHG1230	AHG1120	AHG1230	AHG1120	AHG1120	
NSP	9	Packing Sheet Under	AHG1290	AHG1235	AHG1290	AHG1235	AHG1235	
	10	Vinyl Sheet Under	AHG1289	AHG1234	AHG1289	AHG1234	AHG1234	
	11	Remote Control Unit (CU-SD110)	AXD1448 (CU-SD110)	AXD1448 (CU-SD110)	AXD1449 (CU-SD111)	AXD1449 (CU-SD111)	AXD1449 (CU-SD111)	
	16	CONV. Attention Card	ARM1173	ARM1173	ARM1174	ARM1174	ARM1174	
	17	Operating Instructions (English)	ARB1527	ARB1527	ARB1528	ARB1528	ARB1528	
NSP	19	Warranty Card	ARY1026	ARY1026	ARY1050	ARY1050	Not used	
NSP	20	Poly Bag	AHG1285	AHG1285	AHG1285	AHG1285	Not used	
	22	Special Screw	ABA1280	ABA1280	Not used	Not used	Not used	
NSP	23	Wrapper Bag	AHG1076	AHG1076	Not used	Not used	Not used	
	25	Panel Case	AHB1215	AHB1216	Not used	Not used	Not used	
	27	Contrast Screen	AAK2749	AAK2750	Not used	Not used	Not used	
	28	Acrylic Caution Card	ARH1167	ARH1167	Not used	Not used	Not used	
	29	Frame Cover H	AAP1613	AAP1614	Not used	Not used	Not used	
	30	Frame Cover V Assy	AAP1617	AAP1619	Not used	Not used	Not used	
	31	Panel Frame H	AAP1629	AAP1630	Not used	Not used	Not used	
	32	Panel Frame V	AND1169	AND1167	Not used	Not used	Not used	
NSP	33	Under Cushion A	AHA2258	AHA2260	AHA2258	AHA2260	AHA2260	

2.2 FRONT VIEW (1/2)


For SD-582HD5, SD-532HD5
31
4
5
11
31
For PRO-610HD, PRO-510HD
1
2
3
4
5
3
4
5
3
4
5
3
4
5
3
For SD-582HD5, SD-532HD5
2
1
6
7
8
14
12
4
5
14
4
5
14
4
5
14
10
9
4
5
6
7
For PRO-610HD, PRO-510HD
20
7
20
7
11
PRO-610HD, PRO-510HD Only
15
28
7
SD-582HD5, SD-532HD5 Only
27
29
24
25
30
23
21
24
19
24
18
7
13
16
17
16
For PRO-610HD, PRO-510HD
19
24
25
For SD-582HD5, SD-532HD5
19
24
25

(1) FRONT VIEW (1/2) PARTS LIST

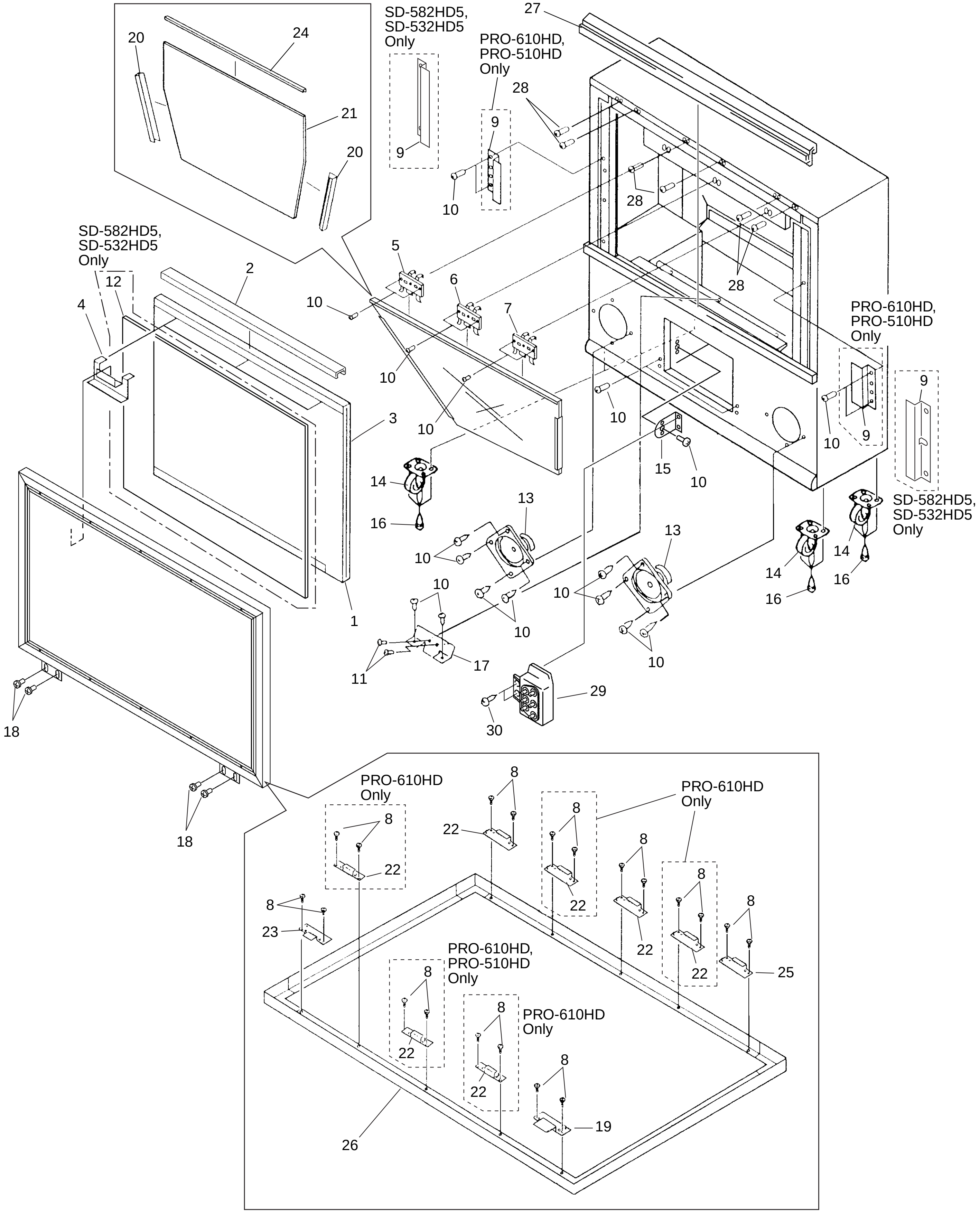
Mark	No.	Description	Part No.
	1	Grille	See Contrast table (2)
	2	Badge	See Contrast table (2)
NSP	3	Catcher A	See Contrast table (2)
	4	Magic Tape	AEC1349
	5	Screw	ABA1271
	6	Side Cover	See Contrast table (2)
	7	Special Screw	ABA1240
	8	Side Panel Assy L	See Contrast table (2)
	9	Side Panel Assy R	See Contrast table (2)
	10	Door Assy	See Contrast table (2)
	11	Blind Plate	See Contrast table (2)
	12	Catcher F2M	AEC1609
	13	Front Panel Assy	See Contrast table (2)
	14	Catch B	See Contrast table (2)
	15	Power Knob	See Contrast table (2)
	16	Screw	ABZ40P080FZK
	17	FRONT INPUT Assy	See Contrast table (2)
	18	POWER SW Assy	AWZ6467
	19	FRONT CONTROL Assy	AWZ6462
	20	Screw	See Contrast table (2)
NSP	21	Switch Holder	ANG2313
	22	....	
	23	Screw	AMZ30P060FZK
	24	Screw	APZ30P080FZK
	25	LED DPO Assy	See Contrast table (2)
	26	....	
	27	Control Sheet	See Contrast table (2)
	28	Indicator Panel L	See Contrast table (2)
	29	Indicator Panel R	See Contrast table (2)
NSP	30	Front Shield	ANK1502
	31	Special Screw	See Contrast table (2)

(2) CONTRAST TABLE

PRO-610HD, PRO-510HD, SD-582HD5 and SD-532HD5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			PRO-610HD	PRO-510HD	SD-582HD5	SD-532HD5	
	1	Grille	AMM3003	AMM3004	AMR3173	AMR3174	
	2	Badge	AAM1081	AAM1081	AAM1088	AAM1088	
	3	Catcher A	ANZ-241	ANZ-241	Not used	Not used	
	6	Side Cover	AMR3107	AMR3107	Not used	Not used	
	8	Side Panel Assy L	AMB2662	AMB2664	Not used	Not used	
	9	Side Panel Assy R	AMB2663	AMB2665	Not used	Not used	
	10	Door Assy	AAN1461	AAN1461	AAN1459	AAN1457	
	11	Blind Plate	AMM2933	AMM2933	AMM3009	AMM3009	
	13	Front Panel Assy	AMB2666	AMB2666	Not used	Not used	
	13	Control Panel	Not used	Not used	AMB2657	AMB2657	
	14	Catch B	AEC1507	AEC1507	ANZ–242	ANZ–242	
	15	Power Knob	AAD4105	AAD4105	Not used	Not used	
	17	FRONT INPUT Assy	AWZ6466	AWZ6466	AWZ6471	AWZ6471	
	20	Screw	ABA1239	ABA1239	Not used	Not used	
	25	LED DPO Assy	AWZ6463	AWZ6463	AWZ6470	AWZ6470	
	27	Control Sheet	Not used	Not used	AMB2751	AMB2751	
	28	Indicator Panel L	Not used	Not used	AMB2752	AMB2752	
	29	Indicator Panel R	Not used	Not used	AMB2753	AMB2753	
	31	Special Screw	Not used	Not used	ABA1249	ABA1249	

2.3 FRONT VIEW (2/2)


20
24
21
20
SD-582HD5,
SD-532HD5
Only
9
27
PRO-610HD,
PRO-510HD
Only
28
9
10
28
28
28
SD-582HD5,
SD-532HD5
Only
12
4
2
5
10
6
7
10
10
3
10
PRO-610HD,
PRO-510HD
Only
9
10
9
9
14
16
15
10
13
SD-582HD5,
SD-532HD5
Only
13
10
14
16
14
16
10
10
1
10
10
11
17
10
29
30
18
18
PRO-610HD
Only
8
8
22
22
8
PRO-610HD
Only
8
22
23
8
22
22
8
8
22
25
PRO-610HD,
PRO-510HD
Only
8
22
8
PRO-610HD
Only
22
8
19
26

(1) FRONT VIEW (2/2) PARTS LIST

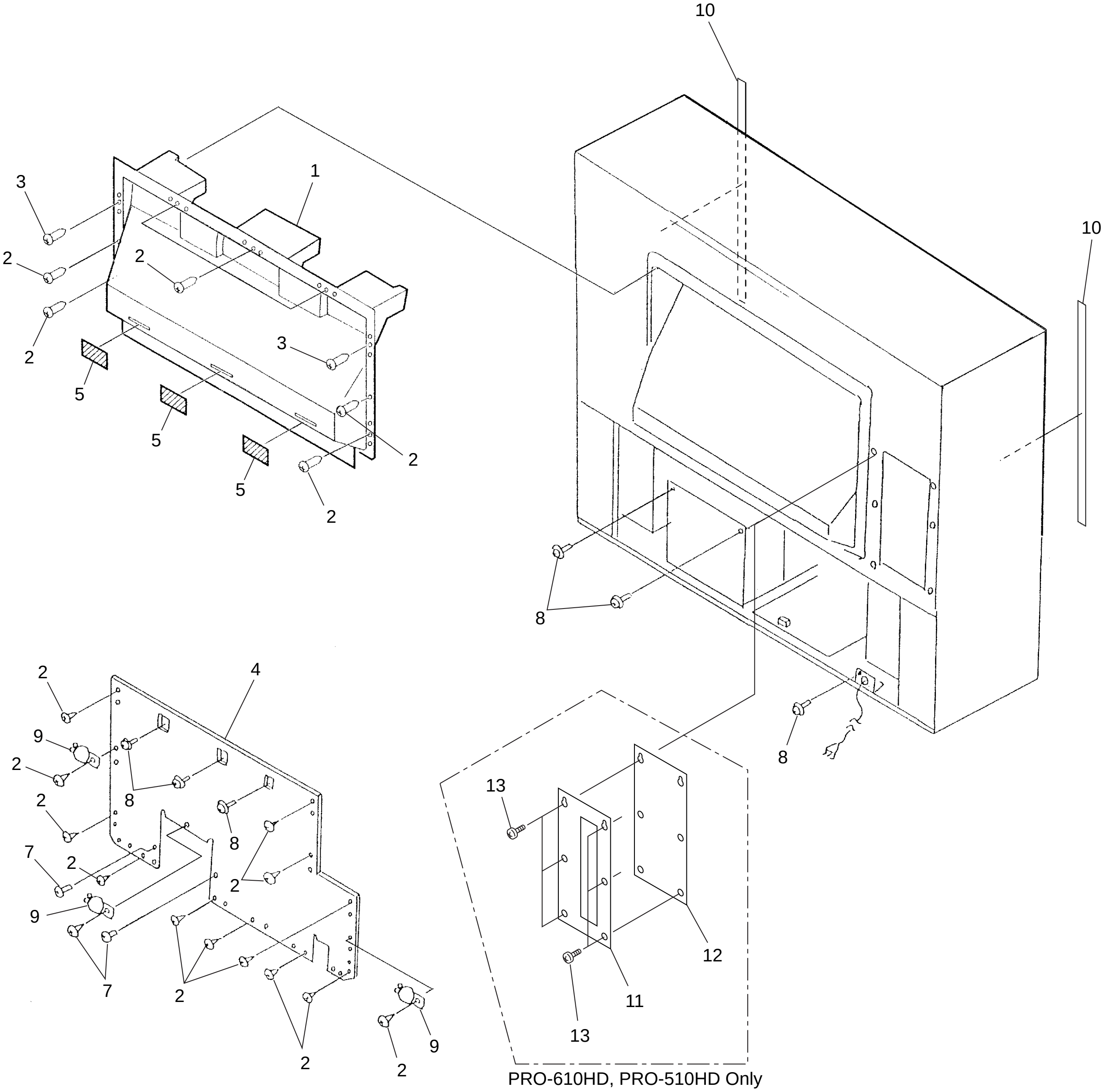
Mark	No.	Description	Part No.
	1	Lenticular Sheet	See Contrast table (2)
	2	Screen Holder Top	See Contrast table (2)
	3	Fresnel	See Contrast table (2)
NSP	4	Upper Cabinet Metal	See Contrast table (2)
NSP	5	Mirror Upper Stay L	ANG2004
NSP	6	Mirror Upper Stay C	ANG2006
NSP	7	Mirror Upper Stay R	ANG2005
	8	Screw	See Contrast table (2)
NSP	9	Screen Side Fitting	See Contrast table (2)
	10	Special Screw	ABA1240
	11	Screw	ACZ40P080FMC
	12	Contrast Screen	See Contrast table (2)
	13	Cone Speaker	APV1021
	14	Caster	AMR2547
NSP	15	VR Holder	ANG1956
	16	Special Screw	ABA1273
NSP	17	CRT Front Holder	ANG2118
	18	Screw M5	ABA1189
NSP	19	Under Screen Metal B	See Contrast table (2)
	20	Mirror Frame V	See Contrast table (2)
	21	Mirror	See Contrast table (2)
NSP	22	Upper Screen Metal B	See Contrast table (2)
NSP	23	Under Screen Metal A	See Contrast table (2)
	24	Mirror Frame H	See Contrast table (2)
NSP	25	Upper Screen Metal A	See Contrast table (2)
	26	Screen Frame Assy	See Contrast table (2)
	27	Screen Holder Low	See Contrast table (2)
	28	Screw	BYC35P160FZK
⚠	29	Focus VR (VR1)	ACX1096
	30	Screw	BBZ30P080FZK

(2) CONTRAST TABLE

PRO-610HD, PRO-510HD, SD-582HD5 and SD-532HD5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			PRO-610HD	PRO-510HD	SD-582HD5	SD-532HD5	
	1	Lenticular Sheet	AMR3184	AMR3185	AMR3178	AMR3179	
	2	Screen Holder Top	ANG2369	ANG2370	ANG2363	ANG2364	
	3	Fresnel	AMR3186	AMR3187	AMR3180	AMR3181	
	4	Upper Cabinet Metal	ANG2000	ANG2000	ANG2358	ANG2358	
	8	Screw	BYC40P160FMC	BYC40P160FMC	BYC40P140FZK	BYC40P140FZK	
	9	Screen Side Fitting	ANG1993	ANG1993	ANG2366	ANG2362	
	12	Contrast Screen	Not used	Not used	AAK2747	AAK2748	
NSP	19	Under Screen Metal B	ANG2009	ANG2009	ANG2361	ANG2361	
	20	Mirror Frame V	ANG2373	ANG2374	ANG2373	ANG2374	
	21	Mirror	AMR3188	AMR3189	AMR3188	AMR3189	
NSP	22	Upper Screen Metal B	ANG2002	ANG2002	ANG2360	ANG2360	
NSP	23	Under Screen Metal A	ANG2003	ANG2003	ANG2361	ANG2361	
	24	Mirror Frame H	ANG2371	ANG2372	ANG2371	ANG2372	
NSP	25	Upper Screen Metal A	ANG2001	ANG2001	ANG2359	ANG2359	
	26	Screen Frame Assy	AAP1611	AAP1612	AAP1607	AAP1608	
	27	Screen Holder Low	AAP1621	AAP1622	AAP1609	AAP1610	

2.4 REAR VIEW (1/2)


10
1
3
2
2
2
10
3
5
5
2
5
2
8
2
4
9
2
8
2
8
7
2
2
9
7
2
2
2
9
13
12
11
13
8
PRO-610HD, PRO-510HD Only

(1) REAR VIEW (1/2) PARTS LIST

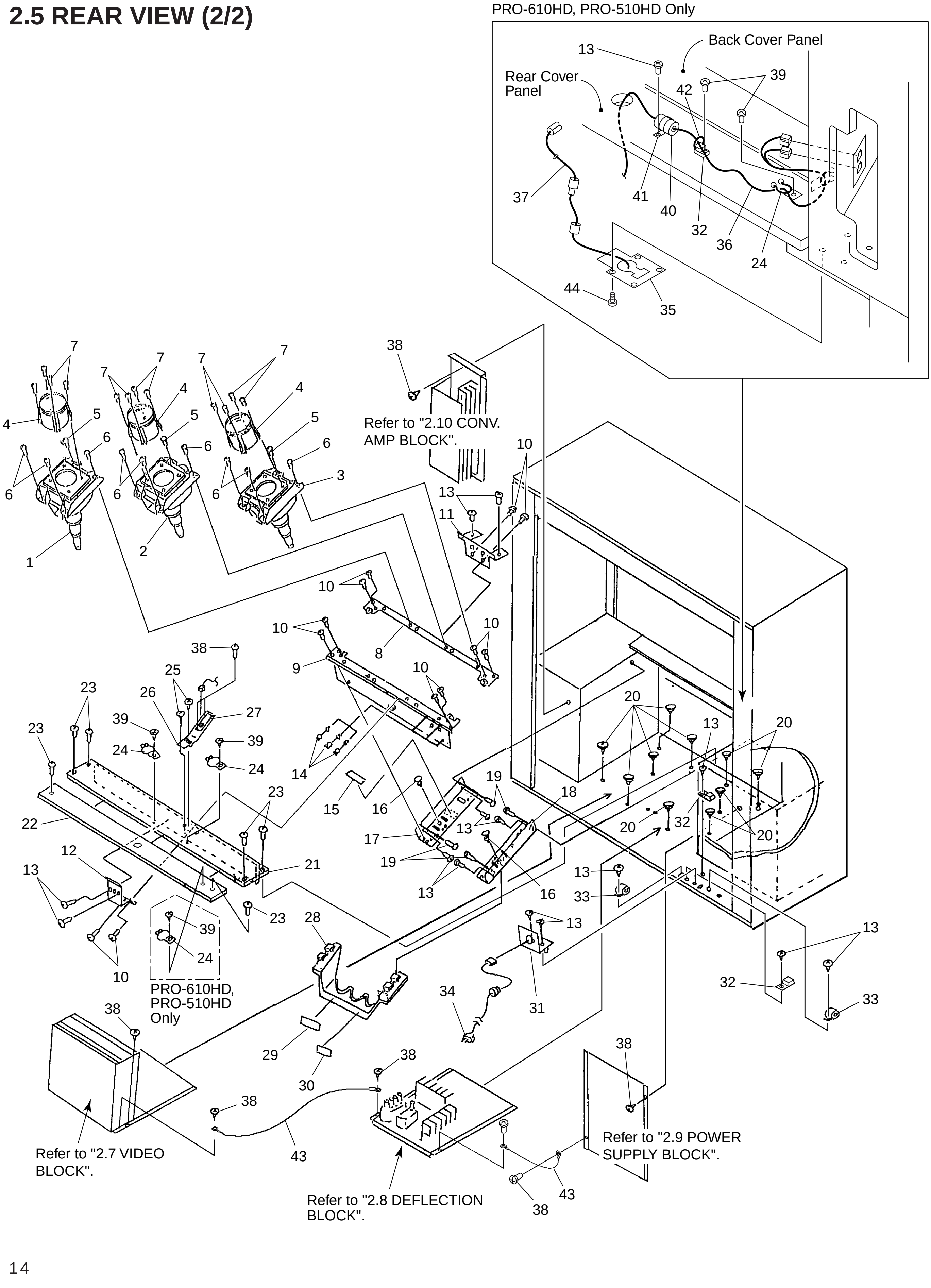
Mark	No.	Description	Part No.
	1	Mirror Case 51	AME2296
	2	Screw	ABA1240
	3	Screw	PYC40T140FZB
	4	Rear Cover	AMM2999
	5	Blind Sheet	AEC1622
	6	....	
	7	Screw	ABZ30P100FZK
	8	Screw	ABA1269
NSP	9	Cabinet Wire Holder	AEC1263
	10	Screen Cushion	See Contrast table (2)
	11	Rear Cover (DTV)	See Contrast table (2)
	12	Rear Cover Sheet	See Contrast table (2)
	13	Screw	PMB40P250FZB

(2) CONTRAST TABLE

PRO-610HD, PRO-510HD, SD-582HD5 and SD-532HD5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			PRO-610HD	PRO-510HD	SD-582HD5	SD-532HD5	
	10	Screen Cushion	AEC1830	AEC1831	AEC1845	AEC1844	
	11	Rear Cover (DTV)	AMM3000	AMM3000	Not used	Not used	
	12	Rear Cover Sheet	AMR3190	AMR3190	Not used	Not used	

2.5 REAR VIEW (2/2)


PRO-610HD, PRO-510HD Only
Back Cover Panel
Rear Cover Panel
13
39
42
37
41
40
32
36
24
44
35
7
4
5
6
1
2
3
38
Refer to "2.10 CONV. AMP BLOCK".
10
13
11
8
9
25
26
27
23
39
24
14
15
16
17
18
19
20
22
21
12
28
PRO-610HD, PRO-510HD Only
34
31
32
33
29
30
43
Refer to "2.7 VIDEO BLOCK".
Refer to "2.8 DEFLECTION BLOCK".
Refer to "2.9 POWER SUPPLY BLOCK".

(1) REAR VIEW (2/2) PARTS LIST

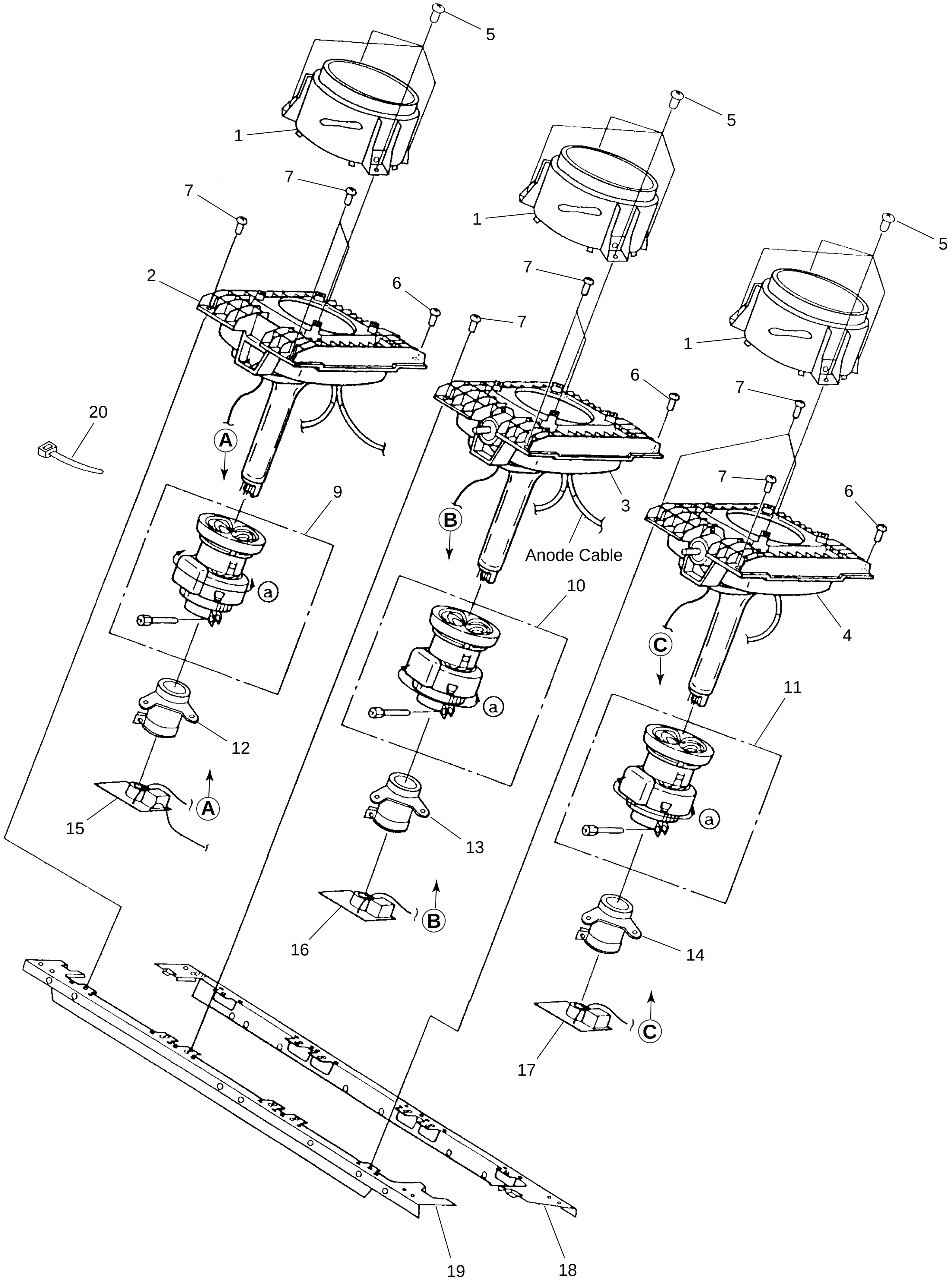
Mark	No.	Description	Part No.
☆	1	CRT Service Assy B	See Contrast table (2)
☆	2	CRT Service Assy G	See Contrast table (2)
☆	3	CRT Service Assy R	See Contrast table (2)
☆	4	Lens Assy	See Contrast table (2)
	5	Screw	FBT40P120FZK
	6	Screw	ABA1168
	7	Screw	AMZ40P080FZK
NSP	8	CRT Front Frame	See Contrast table (2)
NSP	9	CRT Rear Frame	See Contrast table (2)
	10	Screw	ACZ40P080FMC
NSP	11	CRT Front Holder	ANG2118
NSP	12	CRT Rear Holder	ANG2119
	13	Screw	ABA1240
	14	Cord Holder	AEC1257
NSP	15	Tube Label	AAX2497
	16	Rivet	AEC-441
NSP	17	CRT Stand Holder R	ANA1497
NSP	18	CRT Stand Holder L	ANA1496
	19	Screw	PMB50P250FZB
	20	Special Screw	ABA1121
NSP	21	Back Cover Panel	See Contrast table (2)
	22	Rear Cover Panel	AMM3010
	23	Screw	ABA1241
NSP	24	Cabinet Wire Holder	AEC1263
	25	Screw	ABA1279
NSP	26	Fixing Metal	ANG1958
	27	SR Assy	AWZ6465
NSP	28	Tray	AMR2563
NSP	29	Solder Warning Label	AAX2672
NSP	30	Warning Label (KC)	AAX1797
NSP	31	AC Cord Holder A	ANG2307
NSP	32	Bind Holder	AEC1785
	33	Ferrite Core	ATX1033
⚠	34	AC Power Cord	ADG1180
NSP	35	AC Cord Holder B	See Contrast table (2)
	36	Wire Harness C (J14)	See Contrast table (2)
⚠	37	AC Power Cord	See Contrast table (2)
	38	Screw	BBZ30P080FZK
	39	Screw	ABA1271
	40	Ferrite Core	See Contrast table (2)
NSP	41	Nylon Clamp 18N	AEC1789
	42	Nylon Binder	AEC-093
	43	1P Lead Wire (J1)	ADX2505
	44	Screw	PMB40P250FZB

(2) CONTRAST TABLE

PRO-610HD, PRO-510HD, SD-582HD5 and SD-532HD5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			PRO-610HD	PRO-510HD	SD-582HD5	SD-532HD5	
☆	1	CRT Service Assy B	AWY1422	AWY1418	AWY1420	AWY1418	
☆	2	CRT Service Assy G	AWY1413	AWY1417	AWY1417	AWY1417	
☆	3	CRT Service Assy R	AWY1421	AWY1416	AWY1419	AWY1416	
☆	4	Lens Assy	AMR3183	AMR2833	AMR2833	AMR2833	
NSP	8	CRT Front Frame	ANA1613	ANA1614	ANA1613	ANA1614	
NSP	9	CRT Rear Frame	ANA1615	ANA1616	ANA1615	ANA1616	
NSP	21	Back Cover Panel	AMM3001	AMM3002	AMM3001	AMM3002	
NSP	35	AC Cord Holder B	ANG2311	ANG2311	Not used	Not used	
	36	Wire Harness C (J14)	ADX2491	ADX2491	Not used	Not used	
⚠	37	AC Power Cord	ADG1185	ADG1185	Not used	Not used	
	40	Ferrite Core (L9)	ATX1031	ATX1031	Not used	Not used	

2.6 CRT BLOCK


A
B
C
a
a
a
Anode Cable
A
B
C

(1) CRT BLOCK PARTS LIST

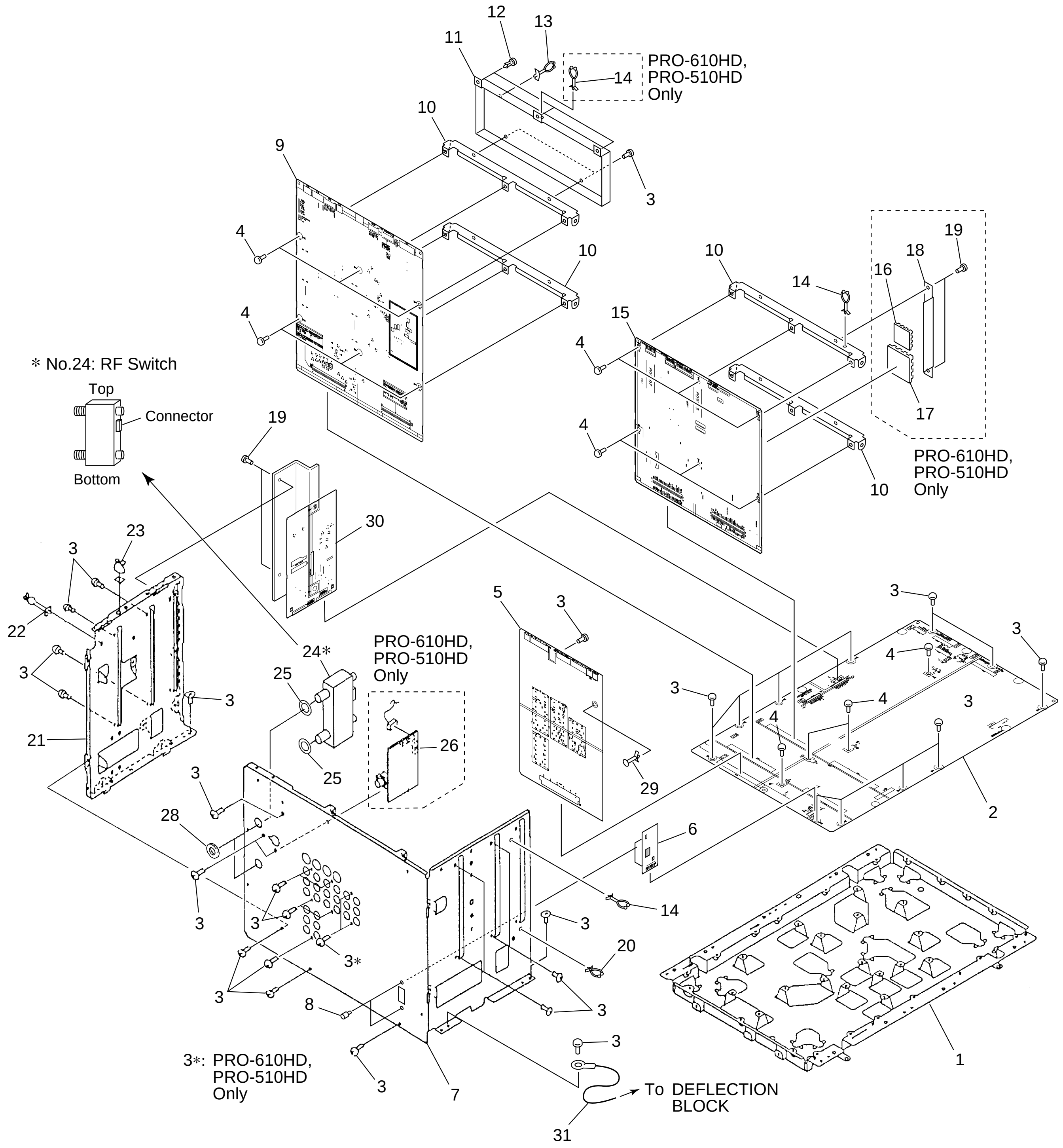
Mark	No.	Description	Part No.
☆	1	Lens Assy	See Contrast table (2)
☆	2	CRT Service Assy R	See Contrast table (2)
☆	3	CRT Service Assy G	See Contrast table (2)
☆	4	CRT Service Assy B	See Contrast table (2)
	5	Screw	AMZ40P080FZK
	6	Screw	FBT40P120FZK
	7	Screw	ABA1168
	8	....	
⚠	9	Deflection Yoke (L1)	ATL1136
⚠	10	Deflection Yoke (L2)	ATL1136
⚠	11	Deflection Yoke (L3)	ATL1136
⚠	12	VM Coil (L4)	ATL1137
⚠	13	VM Coil (L5)	ATL1137
⚠	14	VM Coil (L6)	ATL1137
	15	R. CRT DRIVE Assy	AWZ6457
	16	G. CRT DRIVE Assy	AWZ6458
	17	B. CRT DRIVE Assy	AWZ6459
NSP	18	CRT Rear Frame	See Contrast table (2)
NSP	19	CRT Front Frame	See Contrast table (2)
	20	Nylon Binder	AEC-093

(2) CONTRAST TABLE

PRO-610HD, PRO-510HD, SD-582HD5 and SD-532HD5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			PRO-610HD	PRO-510HD	SD-582HD5	SD-532HD5	
☆	1	Lens Assy	AMR3183	AMR2833	AMR2833	AMR2833	
☆	2	CRT Service Assy R	AWY1421	AWY1416	AWY1419	AWY1416	
☆	3	CRT Service Assy G	AWY1413	AWY1417	AWY1417	AWY1417	
☆	4	CRT Service Assy B	AWY1422	AWY1418	AWY1420	AWY1418	
NSP	18	CRT Rear Frame	ANA1615	ANA1616	ANA1615	ANA1616	
NSP	19	CRT Front Frame	ANA1613	ANA1614	ANA1613	ANA1614	

2.7 VIDEO BLOCK


12
13
11
PRO-610HD,
PRO-510HD
Only
14
10
9
3
4
10
10
19
18
16
14
15
4
4
17
PRO-610HD,
PRO-510HD
Only
10
∗ No.24: RF Switch
Top
Connector
Bottom
19
30
23
3
22
3
3
21
24∗
PRO-610HD,
PRO-510HD
Only
25
25
26
5
3
29
3
4
3
4
3
4
3
3
2
3
28
3
3
3
3∗
3
8
6
14
3
20
3
3
7
3
31
To DEFLECTION
BLOCK
1
3∗: PRO-610HD,
PRO-510HD
Only

(1) VIDEO BLOCK PARTS LIST

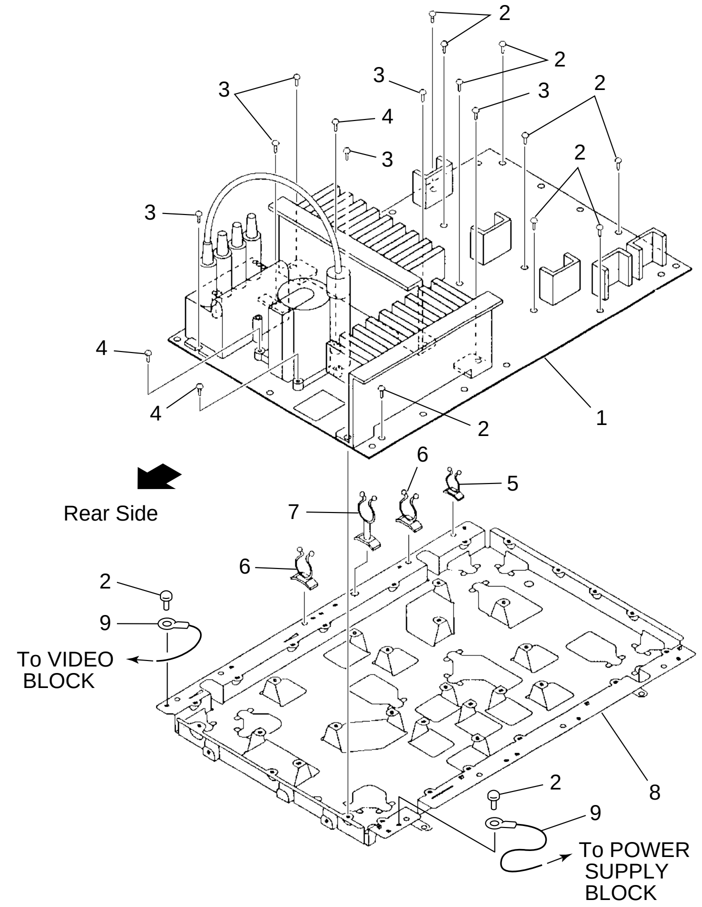
Mark	No.	Description	Part No.
NSP	1	Video Chassis	ANA1584
	2	VIDEO Assy	See Contrast table (2)
	3	Screw	BBZ30P080FZK
	4	Screw	BBZ30P080FCU
	5	AV I/O Assy	See Contrast table (2)
	6	RGB SW Assy	AWZ6468
	7	Rear Panel	See Contrast table (2)
	8	Hexagon Head Screw	BBA1051
	9	SIGNAL Assy	See Contrast table (2)
NSP	10	PCB Sub Frame	ANG2304
	11	Signal Shield	ANK1629
	12	Rivet	AEC–441
NSP	13	Cable Clip D3S	AEC1782
	14	Cable Clip	AEC1806
	15	SUB VIDEO Service Assy	See Contrast table (2)
NSP	16	IP Heat Sink S	See Contrast table (2)
NSP	17	IP Heat Sink M	See Contrast table (2)
	18	IP Heat Sink Holder	See Contrast table (2)
	19	Screw	See Contrast table (2)
NSP	20	Cable Clip D3M	AEC1783
	21	PCB Side Holder	ANG2305
NSP	22	Lead Clamper M	AEC1611
NSP	23	Cable Clip A	AEC1325
	24	RF Switch	AXF1088
	25	Washer	WAXOF160N100
	26	BNC Assy	See Contrast table (2)
	27	Screw	See Contrast table (2)
	28	Nut	BBN1005
NSP	29	Mini Card Spacer	AEC1835
	30	AUDIO Assy	See Contrast table (2)
	31	1P Laed Wire	ADX2505

(2) CONTRAST TABLE

PRO-610HD, PRO-510HD, SD-582HD5 and SD-532HD5 are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.				Remarks
			PRO-610HD	PRO-510HD	SD-582HD5	SD-532HD5	
	2	VIDEO Assy	AWV1799	AWV1799	AWV1804	AWV1804	
	5	AV I/O Assy	AWV1802	AWV1802	AWV1807	AWV1807	
	7	Rear Panel	ANC2336	ANC2336	ANC2337	ANC2337	
	9	SIGNAL Assy	AWV1800	AWV1800	AWV1805	AWV1805	
	15	SUB VIDEO Service Assy	AWV1819	AWV1819	Not used	Not used	
	15	SUB VIDEO Assy	Not used	Not used	AWV1806	AWV1806	
NSP	16	IP Heat Sink S	ANH1572	ANH1572	Not used	Not used	
NSP	17	IP Heat Sink M	ANH1571	ANH1571	Not used	Not used	
	18	IP Heat Sink Holder	AEC1850	AEC1850	Not used	Not used	
	26	BNC Assy	AWZ6464	AWZ6464	Not used	Not used	
	27	Screw	BCZ30P080FZK	BCZ30P080FZK	Not used	Not used	
	30	AUDIO Assy	AWZ6472	AWZ6472	AWZ6469	AWZ6469	

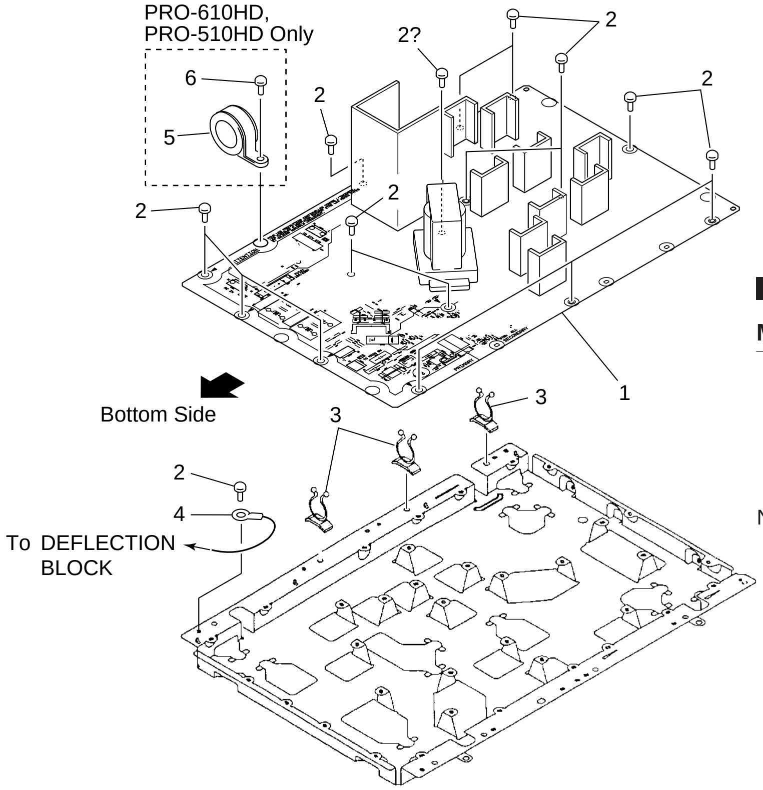
2.8 DEFLECTION BLOCK


2
2
3
3
3
2
4
3
2
3
2
4
4
2
1
6
5
Rear Side
7
6
2
9
To VIDEO BLOCK
2
8
9
To POWER SUPPLY BLOCK

■ DEFLECTION BLOCK PARTS LIST

Mark	No.	Description	Part No.
☆	1	DEFLECTION SERVICE Assy	AWV1809
	2	Screw	BBZ30P080FZK
	3	Screw	ABZ30P100FZK
	4	Screw	VBZ30P200FMC
NSP	5	Cable Clip D3S	AEC1782
NSP	6	Cable Clip D3M	AEC1783
NSP	7	Cable CliP	AEC1325
NSP	8	DF Chassis	ANA1583
	9	1P Laed Wire	ADX2505

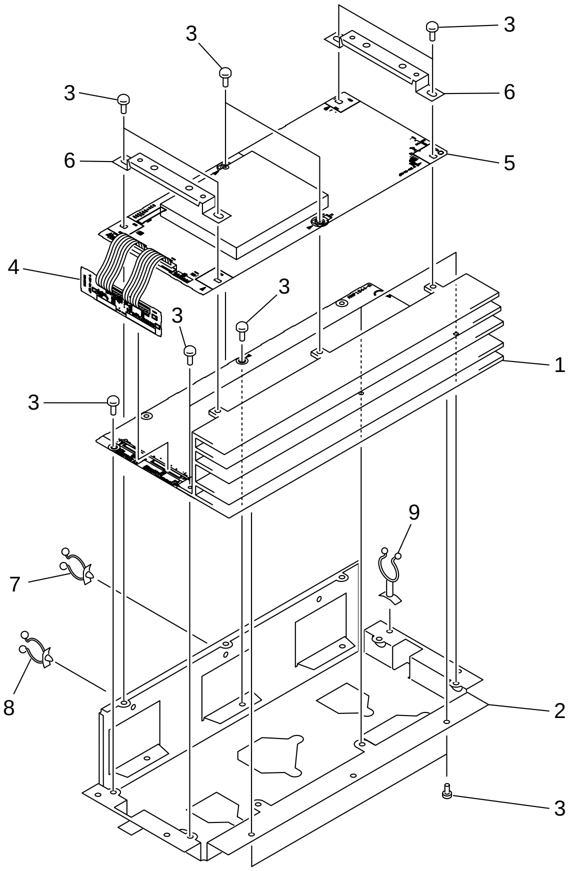
2.9 POWER SUPPLY BLOCK


PRO-610HD,
PRO-510HD Only
2?
2
6
2
2
5
2
2
1
Bottom Side
3
3
2
4
To DEFLECTION BLOCK

■ POWER SUPPLY BLOCK PARTS LIST

Mark	No.	Description	Part No.
	1	POWER SUPPLY Assy (for PRO-610HD, PRO-510HD)	AWV1795
	1	POWER SUPPLY Assy (for SD-582HD5, SD-532HD5)	AWV1808
	2	Screw	BBZ30P080FZK
NSP	3	Cable Clip D3M	AEC1783
	4	1P Laed Wire	ADX2505
	5	Ferrite Core (PRO-610HD, PRO-510HD only)	ATX1033
	6	Screw (PRO-610HD, PRO-510HD only)	ABZ30P100FZK

2.10 CONV. AMP BLOCK



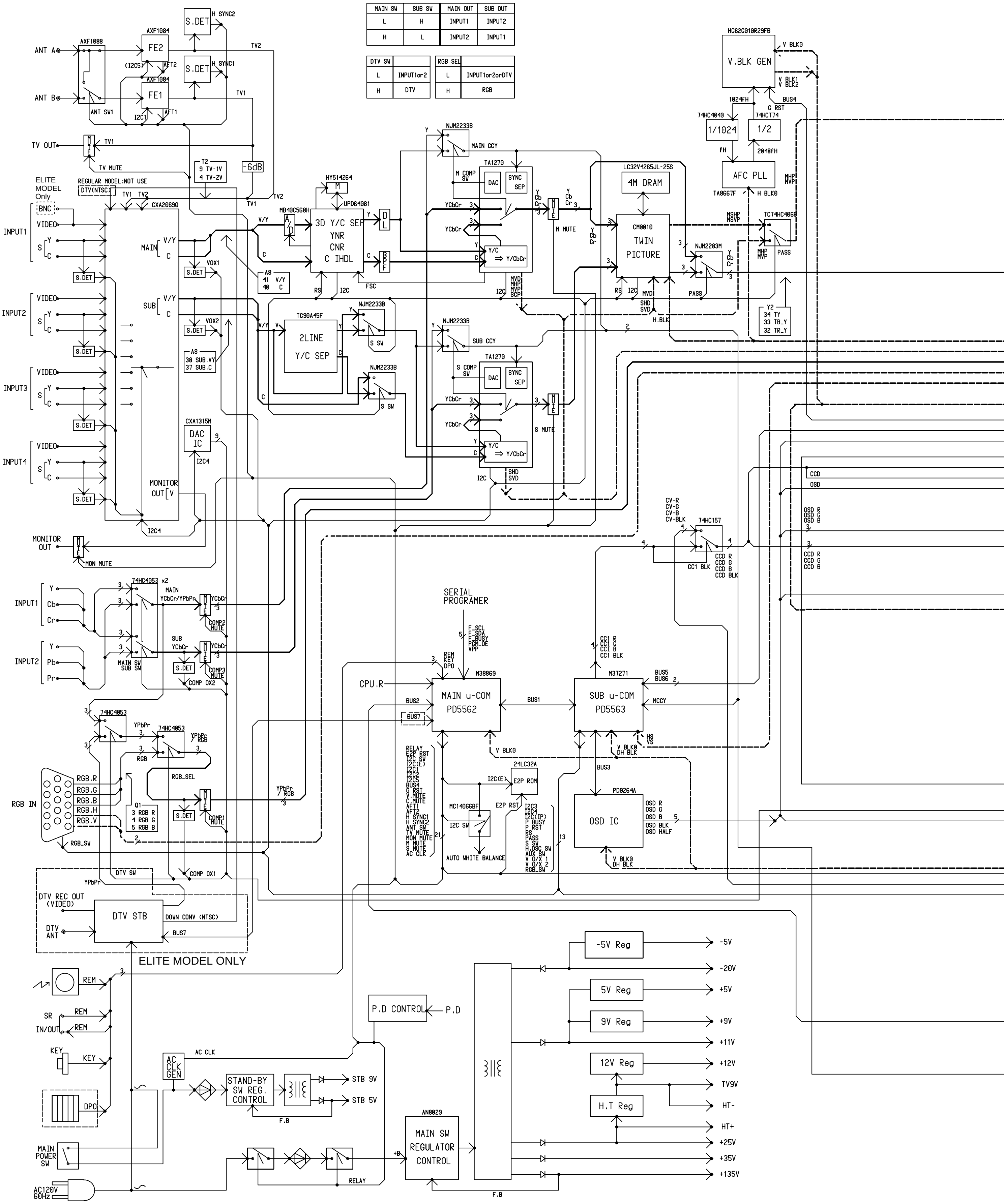
■ CONV. AMP BLOCK PARTS LIST

Mark	No.	Description	Part No.
	1	CONV. AMP Assy	AWZ6456
NSP	2	CONV. Chassis	ANA1619
	3	Screw	ABZ30P100FMC
	4	CONNECTOR Assy	AWZ6461
	5	DIGITAL CONV. ASSY	AWZ6460
NSP	6	CONV. Holder	ANG2365
NSP	7	Cable Clip D3M	AEC1783
NSP	8	Cable Clip D3S	AEC1782
	9	Cable Clip	AEC1806

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

3.1.1 OVERALL BLOCK DIAGRAM



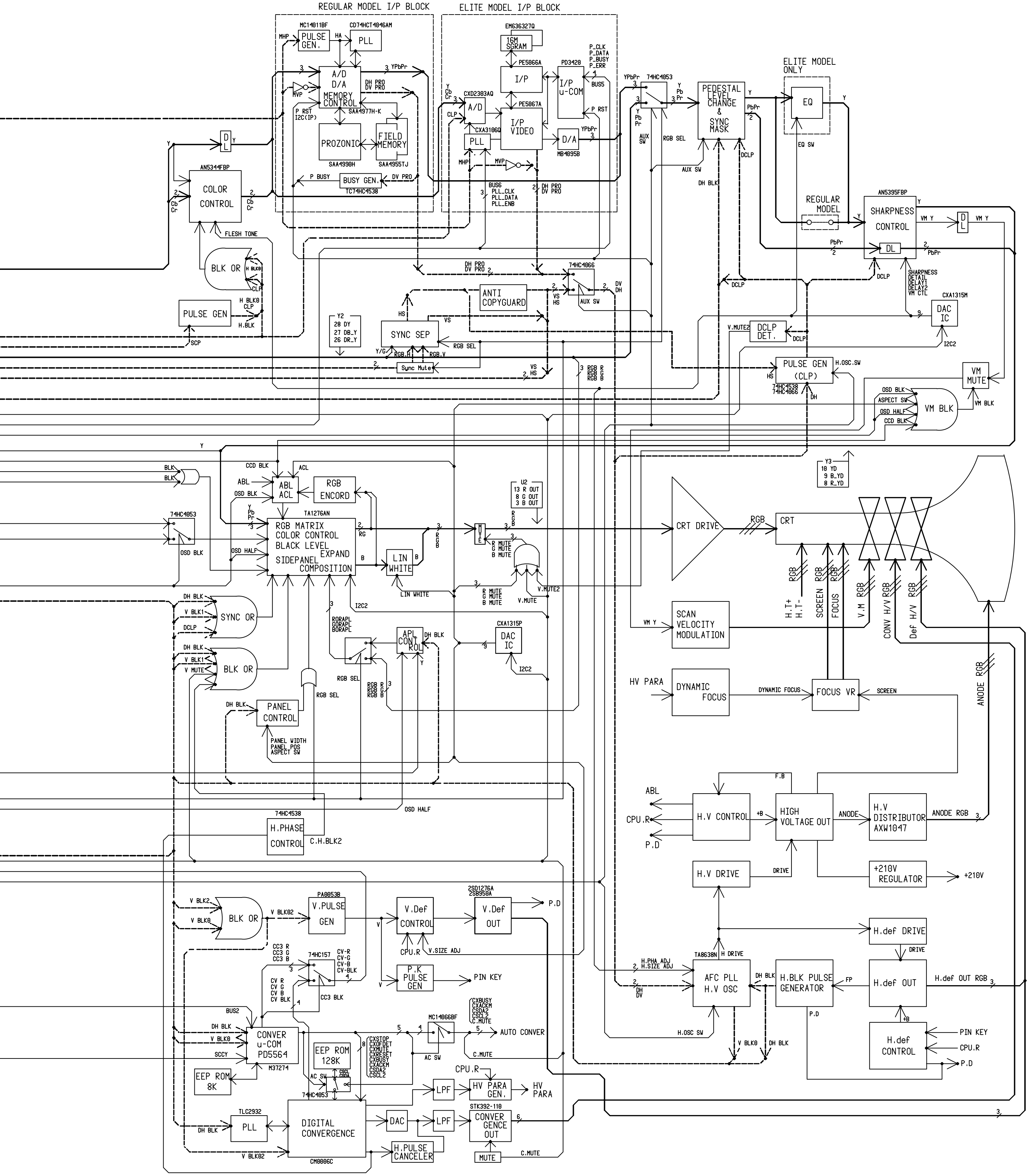
MAIN SW	SUB SW	MAIN OUT	SUB OUT
L	H	INPUT1	INPUT2
H	L	INPUT2	INPUT1

DTV SW	
L	INPUT1or2
H	DTV

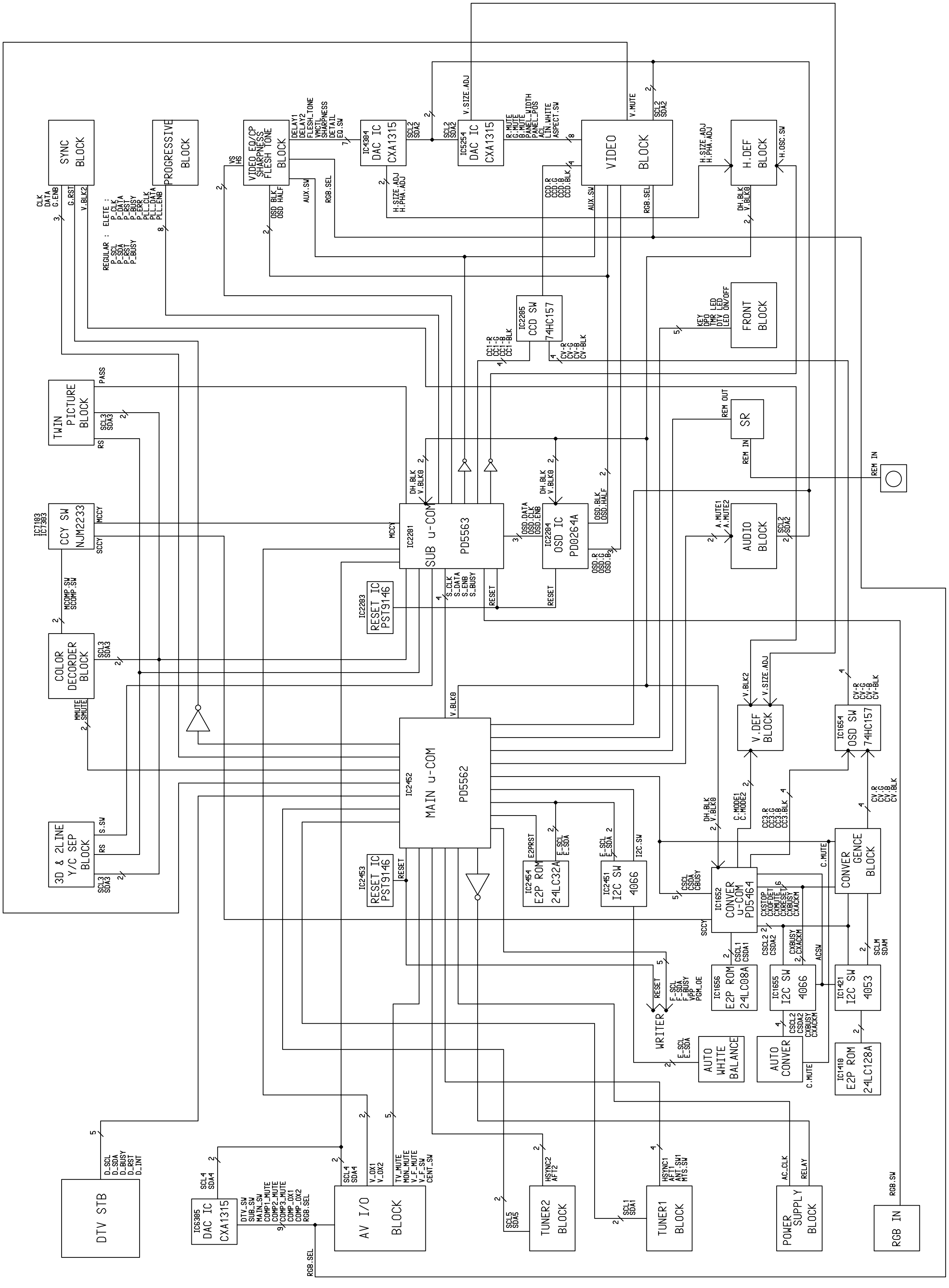
RGB SEL	
L	INPUT1or2orDTV
H	RGB

ANT A
ANT B
AXF1088
AXF1084
FE2
FE1
I2C5
I2C1
AFT2
AFT1
ANT SW1
S.DET
H SYNC2
H SYNC1
TV2
TV1
TV OUT
MUTE
TV MUTE
T2
9 TV-1V
4 TV-2V
-6dB
ELITE MODEL Only
REGULAR MODEL:NOT USE
DTV(NTSC)
BNC
INPUT1
INPUT2
INPUT3
INPUT4
VIDEO
S
Y
C
CXA2069Q
MAIN
SUB
V/Y
MONITOR OUT
I2C4
VOX1
VOX2
A8
41 V/Y
40 C
38 SUB.V/Y
37 SUB.C
CXA1315M
DAC IC
MONITOR OUT
MON MUTE
HY514264
M
MB40C568H
A/D
UPD64081
3D Y/C SEP
YNR
CNR
C IHDL
D/L
BPF
FSC
RS
I2C
TC90A45F
2LINE Y/C SEP
NJM2233B
S SW
MAIN CCY
SUB CCY
TA1270
M COMP SW
S COMP SW
DAC
SYNC SEP
YCbCr
Y/C ⇒ Y/CbCr
M MUTE
S MUTE
MVD
MHP
MVP
SCP
SHD
SVD
LC32V4265JL-25S
4M DRAM
CM0010
TWIN PICTURE
NJM2283M
PASS
HG62G010R29FB
V.BLK GEN
V BLK0
V BLK1
V BLK2
1024FH
BUS4
G RST
74HC4040
74HCT74
1/1024
1/2
FH
2048FH
AFC PLL
TA8667F
H BLK0
MSHP
MSVP
TC74HC4066
MHP
MVP
H.BLK
Y2
34 TY
33 TB_Y
32 TR_Y
CCD
OSD
OSD R
OSD G
OSD B
CCD R
CCD G
CCD B
CV-R
CV-G
CV-B
CV-BLK
74HC157
CC1 BLK
CCD BLK
74HC4053 x2
YCbCr/YPbPr
COMP2 MUTE
COMP3 MUTE
COMP OX2
MAIN SW
SUB SW
Cb
Cr
Pb
Pr
74HC4053
YPbPr
RGB
RGB_SEL
RGB IN
RGB.R
RGB.G
RGB.B
RGB.H
RGB.V
RGB_SW
Q1
3 RGB R
4 RGB G
5 RGB B
COMP1 MUTE
DTV SW
COMP OX1
DTV REC OUT (VIDEO)
DTV ANT
DTV STB
DOWN CONV (NTSC)
BUS7
ELITE MODEL ONLY
SERIAL PROGRAMER
F_SCL
F_SDA
F_BUSY
PGM_OE
VPP
REM
KEY
DPO
CPU.R
BUS2
M38869
MAIN u-COM
PD5562
BUS1
M37271
SUB u-COM
PD5563
BUS5
BUS6
MCCY
HS
VS
CC1 R
CC1 G
CC1 B
CC1 BLK
RELAY
E2P RST
I2C SW
I2C(E)
I2C1
I2C2
I2C5
BUS4
G RST
V.MUTE
C.MUTE
AFT1
AFT2
H SYNC1
H SYNC2
ANT SW
TV MUTE
MON MUTE
M MUTE
S MUTE
AC CLK
V BLK0
24LC32A
E2P ROM
MC14066BF
I2C SW
AUTO WHITE BALANCE
I2C3
I2C4
I2C(IP)
P BUSY
P RST
RS
PASS
S SW
H.OSC SW
AUX SW
V O/X 1
V O/X 2
RGB_SW
DH BLK
BUS3
PD0264A
OSD IC
OSD BLK
OSD HALF
SR
IN/OUT
MAIN POWER SW
AC120V 60Hz
AC CLK GEN
STAND-BY SW REG. CONTROL
STB 9V
STB 5V
F.B
RELAY
+B
P.D CONTROL
P.D
AN8029
MAIN SW REGULATOR CONTROL
-5V Reg
5V Reg
9V Reg
12V Reg
H.T Reg
-5V
-20V
+5V
+9V
+11V
+12V
TV9V
HT-
HT+
+25V
+35V
+135V

Note : Model names indicated by "ELITE" and "REGULAR" are as follows:
ELITE : PRO-610HD and PRO-510HD, REGULAR : SD-582HD5 and SD-532HD5

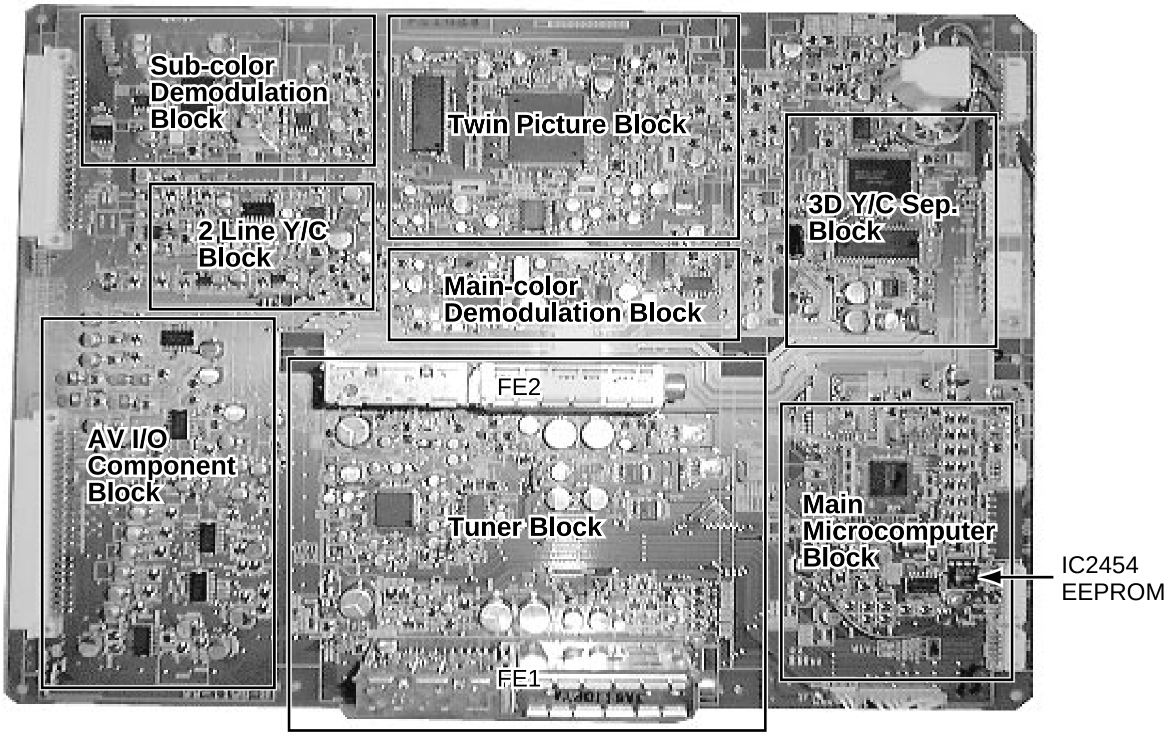

A
B
C
D
REGULAR MODEL I/P BLOCK
ELITE MODEL I/P BLOCK
MC14011BF
PULSE GEN.
CD74HCT4046AM
PLL
A/D D/A MEMORY CONTROL
SAA4977H-K
PROZONIC
SAA4990H
FIELD MEMORY
SAA4955TJ
BUSY GEN.
TC74HC4538
EM636327Q
16M SGRAM
PE5066A
I/P
PD3420
I/P u-COM
CXD2303AQ
A/D
CXA3106Q
PLL
PE5067A
I/P VIDEO
D/A
MB4095B
74HC4053
PEDESTAL LEVEL CHANGE & SYNC MASK
ELITE MODEL ONLY
EQ
EQ SW
REGULAR MODEL
AN5395FBP
SHARPNESS CONTROL
DL
AN5344FBP
COLOR CONTROL
FLESH TONE
BLK OR
PULSE GEN
SCP
74HC4066
ANTI COPYGUARD
SYNC SEP
Sync Mute
DCLP DET.
PULSE GEN (CLP)
74HC4538
74HC4066
CXA1315M
DAC IC
I2C2
VM MUTE
VM BLK
OSD BLK
ASPECT SW
OSD HALF
CCD BLK
ABL ACL
RGB ENCORD
TA1276AN
RGB MATRIX COLOR CONTROL BLACK LEVEL EXPAND SIDEPANEL COMPOSITION
LIN WHITE
MUTE
U2
13 R OUT
8 G OUT
3 B OUT
Y3
10 YD
9 B_YD
8 R_YD
CRT DRIVE
RGB
CRT
H.T+
H.T-
SCREEN
FOCUS
V.M
CONV H/V
Def H/V
ANODE RGB
SYNC OR
BLK OR
APL CONTROL
CXA1315P
DAC IC
PANEL CONTROL
PANEL WIDTH
PANEL POS
ASPECT SW
SCAN VELOCITY MODULATION
VM Y
HV PARA
DYNAMIC FOCUS
DYNAMIC FOCUS
FOCUS VR
74HC4538
H.PHASE CONTROL
C.H.BLK2
OSD HALF
ABL
CPU.R
P.D
H.V CONTROL
F.B
HIGH VOLTAGE OUT
ANODE
H.V DISTRIBUTOR AXW1047
ANODE RGB
H.V DRIVE
DRIVE
+210V REGULATOR
+210V
BLK OR
PA0053B
V.PULSE GEN
V.Def CONTROL
2SD1276A
2SB950A
V.Def OUT
P.D
V.SIZE ADJ
74HC157
CC3 BLK
P.K PULSE GEN
PIN KEY
H.def DRIVE
TA8638N
H DRIVE
H.PHA ADJ
H.SIZE ADJ
AFC PLL H.V OSC
H.BLK PULSE GENERATOR
FP
H.def OUT
H.def OUT RGB
H.OSC SW
V BLK0
DH BLK
H.def CONTROL
PIN KEY
CPU.R
P.D
BUS2
CONVER u-COM PD5564
M37274
EEP ROM 8K
EEP ROM 128K
MC14066BF
AUTO CONVER
C.MUTE
AC SW
74HC4053
LPF
HV PARA GEN.
HV PARA
TLC2932
PLL
DIGITAL CONVERGENCE
CM0006C
DAC
LPF
STK392-110
CONVER GENCE OUT
H.PULSE CANCELER
MUTE
C.MUTE

3.1.2 CONTROL BLOCK

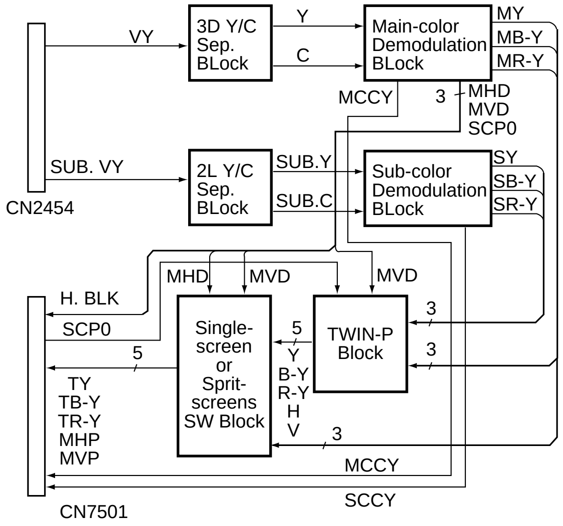

SYNC BLOCK
PROGRESSIVE BLOCK
VIDEO EQ/CP SHARPNESS FLESH TONE BLOCK
IC4304 DAC IC CXA1315
IC5254 DAC IC CXA1315
VIDEO BLOCK
H.DEF BLOCK
IC2205 CCD SW 74HC157
FRONT BLOCK
TWIN PICTURE BLOCK
SR
REM OUT
REM IN
IC7103 IC7303 CCY SW NJM2233
IC2201 SUB u-COM PD5563
IC2204 OSD IC PD0264A
AUDIO BLOCK
IC2203 RESET IC PST9146
COLOR DECORDER BLOCK
IC2452 MAIN u-COM PD5562
V.DEF BLOCK
IC1654 OSD SW 74HC157
3D & 2LINE Y/C SEP BLOCK
IC2453 RESET IC PST9146
IC2454 E2P ROM 24LC32A
IC2451 I2C SW 4066
IC1652 CONVER u-COM PD5464
CONVER GENCE BLOCK
IC1656 E2P ROM 24LC08A
IC1655 I2C SW 4066
IC1421 I2C SW 4053
WRITER
AUTO WHITE BALANCE
AUTO CONVER
IC1410 E2P ROM 24LC128A
DTV STB
IC6305 DAC IC CXA1315
AV I/O BLOCK
TUNER2 BLOCK
TUNER1 BLOCK
POWER SUPPLY BLOCK
RGB IN
CLK DATA G.ENB
G.RST
V.BLK2
REGULAR : P.SCL P.SDA P.RST P.BUSY
ELETE : P.CLK P.DATA P.RST P.BUSY P.ERR PLL_CLK PLL_DATA PLL_ENB
VS HS
DELAY1 DELAY2 FLESH_TONE VMCTL SHARPNESS DETAIL EQ.SW
OSD BLK OSD HALF
AUX.SW
RGB.SEL
SCL2 SDA2
H.SIZE.ADJ H.PHA.ADJ
V.SIZE.ADJ
R.MUTE G.MUTE B.MUTE PANEL_WIDTH PANEL_POS ACL LIN.WHITE ASPECT.SW
V.MUTE
CCD.R CCD.G CCD.B CCD.BLK
H.OSC.SW
DH.BLK V.BLK0
CC1-R CC1-G CC1-B CC1-BLK
CV-R CV-G CV-B CV-BLK
KEY DPD TMR LED DTV LED LED ON/OFF
PASS
SCL3 SDA3
RS
MCCY
SCCY
OSD.DATA OSD.CLK OSD.ENB
OSD BLK OSD HALF
OSD.R OSD.G OSD.B
A.MUTE1 A.MUTE2
S.CLK S.DATA S.ENB S.BUSY
RESET
MCOMP.SW SCOMP.SW
MMUTE SMUTE
V.BLK0
V.BLK2
S.SW
E2PRST
E.SCL E.SDA
I2C.SW
DH.BLK V.BLK0
C.MODE1 C.MODE2
CC3.R CC3.G CC3.B CC3.BLK
CV.R CV.G CV.B CV.BLK
C.MUTE
CSCL CSDA CBUSY
CXSTOP CXOPDET CXMUTE CXRESET CXBUSY CXACKM
SCCY
CSCL1 CSDA1
CSCL2 CSDA2
CXBUSY CXACKM
ACSW
SCLM SDAM
RESET F_SCL F_SDA F_BUSY VPP PGM_OE
D_SCL D_SDA D_BUSY D_RST D_INT
SCL4 SDA4
DTV.SW SUB.SW MAIN.SW COMP1.MUTE COMP2.MUTE COMP3.MUTE COMP.OX1 COMP.OX2 RGB.SEL
V_OX1 V_OX2
TV_MUTE MON.MUTE V_F_MUTE V_F_SW CENT.SW
SCL5 SDA5
HSYNC2 AFT2
SCL1 SDA1
HSYNC1 AFT1 ANT.SW1 MTS.SW
AC.CLK RELAY
RGB.SW
RGB.SEL

3.1.3 SIGNAL BLOCK

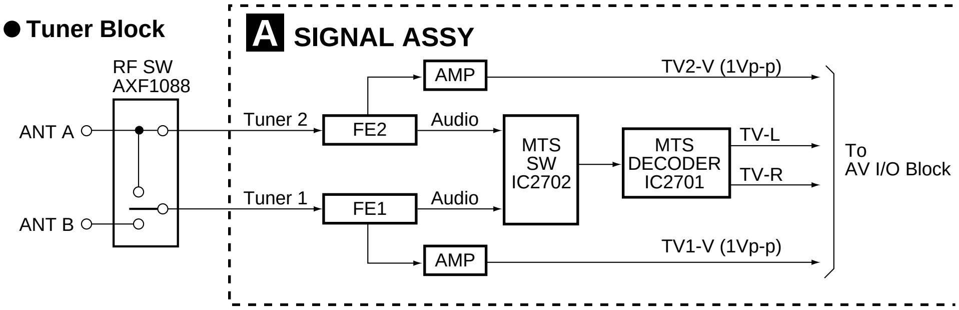
A SIGNAL ASSY


Sub-color Demodulation Block
Twin Picture Block
3D Y/C Sep. Block
2 Line Y/C Block
Main-color Demodulation Block
FE2
AV I/O Component Block
Tuner Block
Main Microcomputer Block
IC2454 EEPROM
FE1

● Video Block


VY
3D Y/C Sep. BLock
Y
C
Main-color Demodulation BLock
MY
MB-Y
MR-Y
MCCY
3
MHD
MVD
SCP0
SUB. VY
CN2454
2L Y/C Sep. BLock
SUB.Y
SUB.C
Sub-color Demodulation BLock
SY
SB-Y
SR-Y
MHD
MVD
MVD
H. BLK
SCP0
5
TY
TB-Y
TR-Y
MHP
MVP
Single-screen or Sprit-screens SW Block
5
Y
B-Y
R-Y
H
V
TWIN-P Block
3
3
3
MCCY
SCCY
CN7501

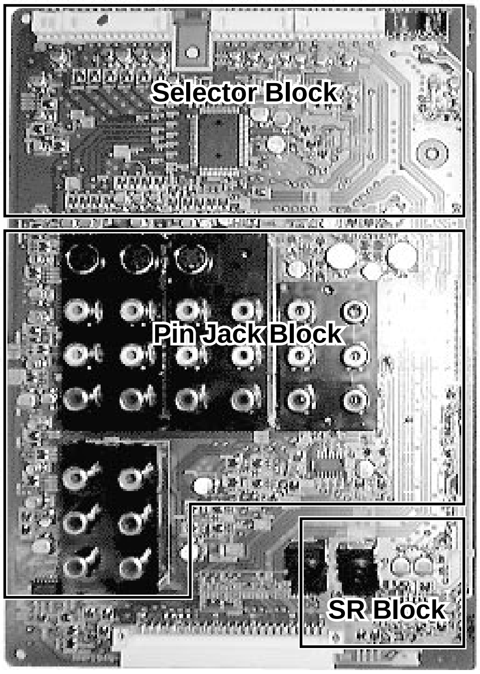
● Tuner Block


A SIGNAL ASSY
RF SW
AXF1088
ANT A
ANT B
Tuner 2
Tuner 1
FE2
FE1
AMP
AMP
Audio
Audio
MTS SW IC2702
MTS DECODER IC2701
TV2-V (1Vp-p)
TV1-V (1Vp-p)
TV-L
TV-R
To AV I/O Block

Note :
Main picture is able to receive the ANT A and B.
Sub picuture is able to receive the ANT A only.

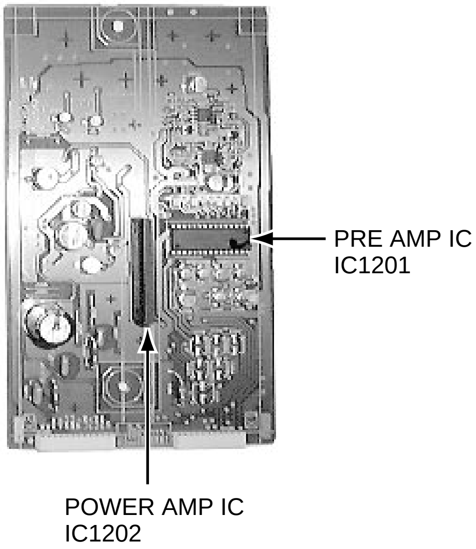
3.1.4 AV I/O and AUDIO ASSYS

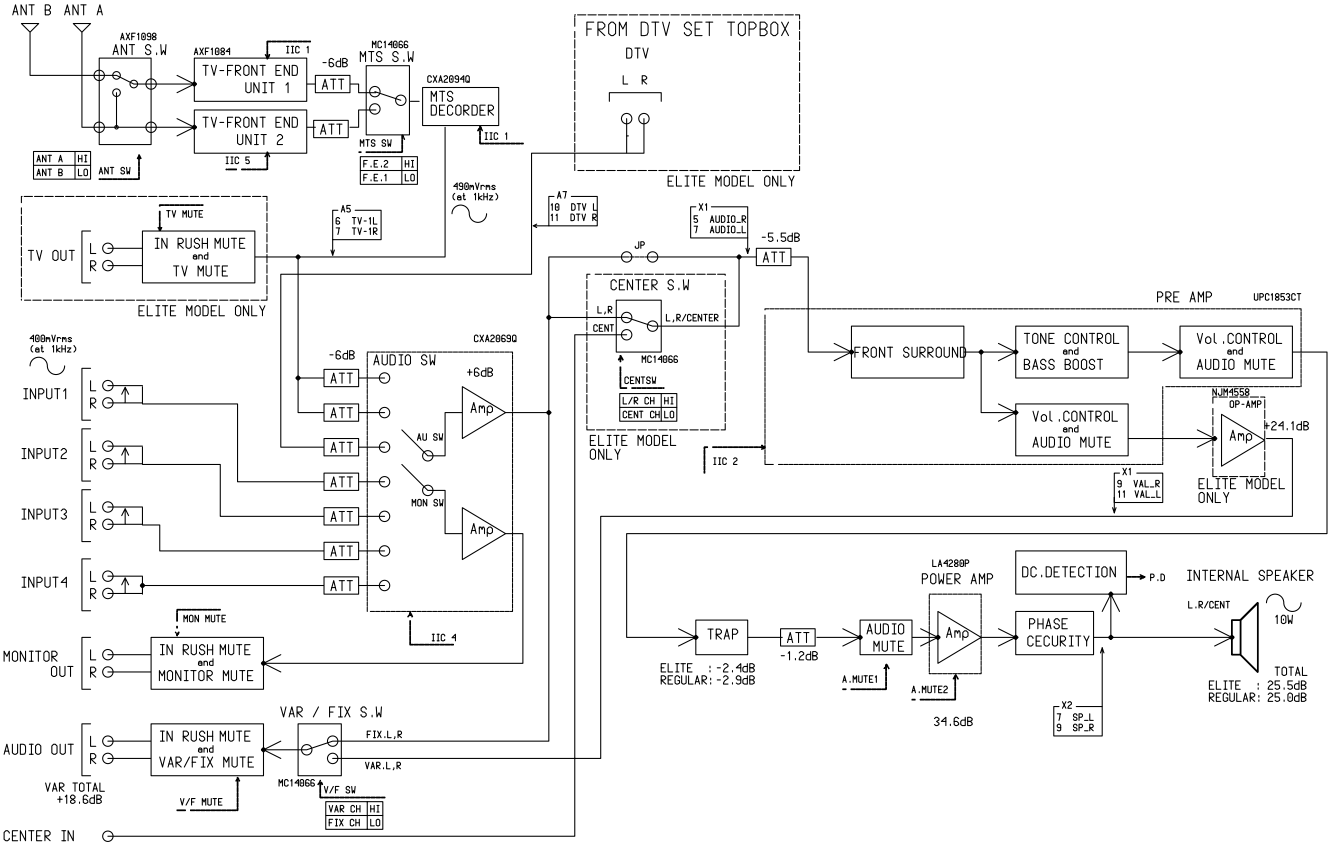
B AV I/O ASSY


Selector Block
Pin Jack Block
SR Block

NOTE) The AUDIO Assy show the state without the heat sink.
Please attach the heat sink when you install the AUDIO Assy.

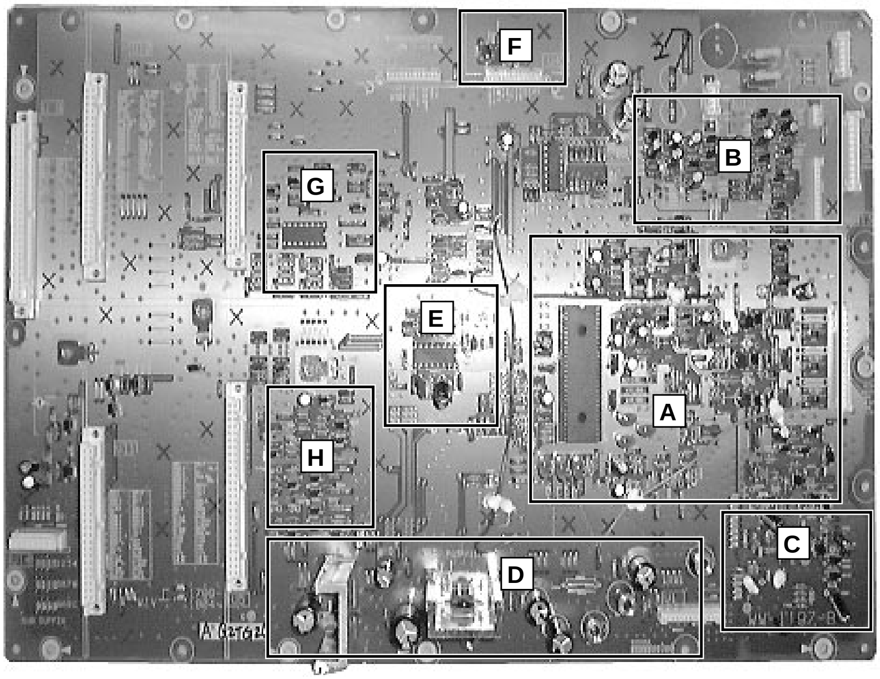
G AUDIO ASSY


PRE AMP IC
IC1201
POWER AMP IC
IC1202

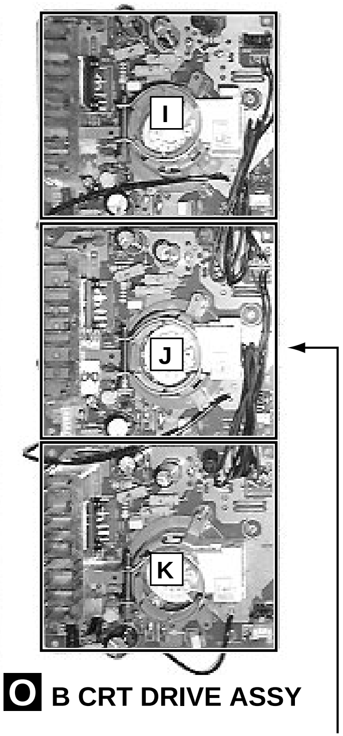

ANT B
ANT A
AXF1098
ANT S.W
AXF1084
IIC 1
TV-FRONT END UNIT 1
TV-FRONT END UNIT 2
-6dB
ATT
ATT
MC14066
MTS S.W
CXA2094Q
MTS DECORDER
IIC 1
IIC 5
ANT A HI
ANT B LO
ANT SW
MTS SW
F.E.2 HI
F.E.1 LO
FROM DTV SET TOPBOX
DTV
L R
ELITE MODEL ONLY
490mVrms (at 1kHz)
A7
10 DTV L
11 DTV R
X1
5 AUDIO_R
7 AUDIO_L
-5.5dB
ATT
JP
A5
6 TV-1L
7 TV-1R
TV MUTE
TV OUT
L
R
IN RUSH MUTE and TV MUTE
ELITE MODEL ONLY
CENTER S.W
L,R
CENT
L,R/CENTER
MC14066
CENTSW
L/R CH HI
CENT CH LO
ELITE MODEL ONLY
PRE AMP
UPC1853CT
FRONT SURROUND
TONE CONTROL and BASS BOOST
Vol.CONTROL and AUDIO MUTE
Vol.CONTROL and AUDIO MUTE
NJM4558
OP-AMP
Amp
+24.1dB
ELITE MODEL ONLY
IIC 2
X1
9 VAL_R
11 VAL_L
490mVrms (at 1kHz)
INPUT1
INPUT2
INPUT3
INPUT4
-6dB
AUDIO SW
CXA2069Q
+6dB
ATT
Amp
AU SW
MON SW
Amp
IIC 4
MON MUTE
MONITOR OUT
IN RUSH MUTE and MONITOR MUTE
VAR / FIX S.W
AUDIO OUT
IN RUSH MUTE and VAR/FIX MUTE
FIX.L,R
VAR.L,R
MC14066
V/F SW
VAR CH HI
FIX CH LO
V/F MUTE
VAR TOTAL +18.6dB
CENTER IN
LA4280P
POWER AMP
DC.DETECTION
P.D
INTERNAL SPEAKER
L.R/CENT
10W
TRAP
ATT
-1.2dB
AUDIO MUTE
Amp
PHASE CECURITY
ELITE : -2.4dB
REGULAR: -2.9dB
A.MUTE1
A.MUTE2
34.6dB
X2
7 SP_L
9 SP_R
TOTAL
ELITE : 25.5dB
REGULAR: 25.0dB

3.1.5 VIDEO, R, G and B CRT DRIVE ASSYS

E VIDEO ASSY

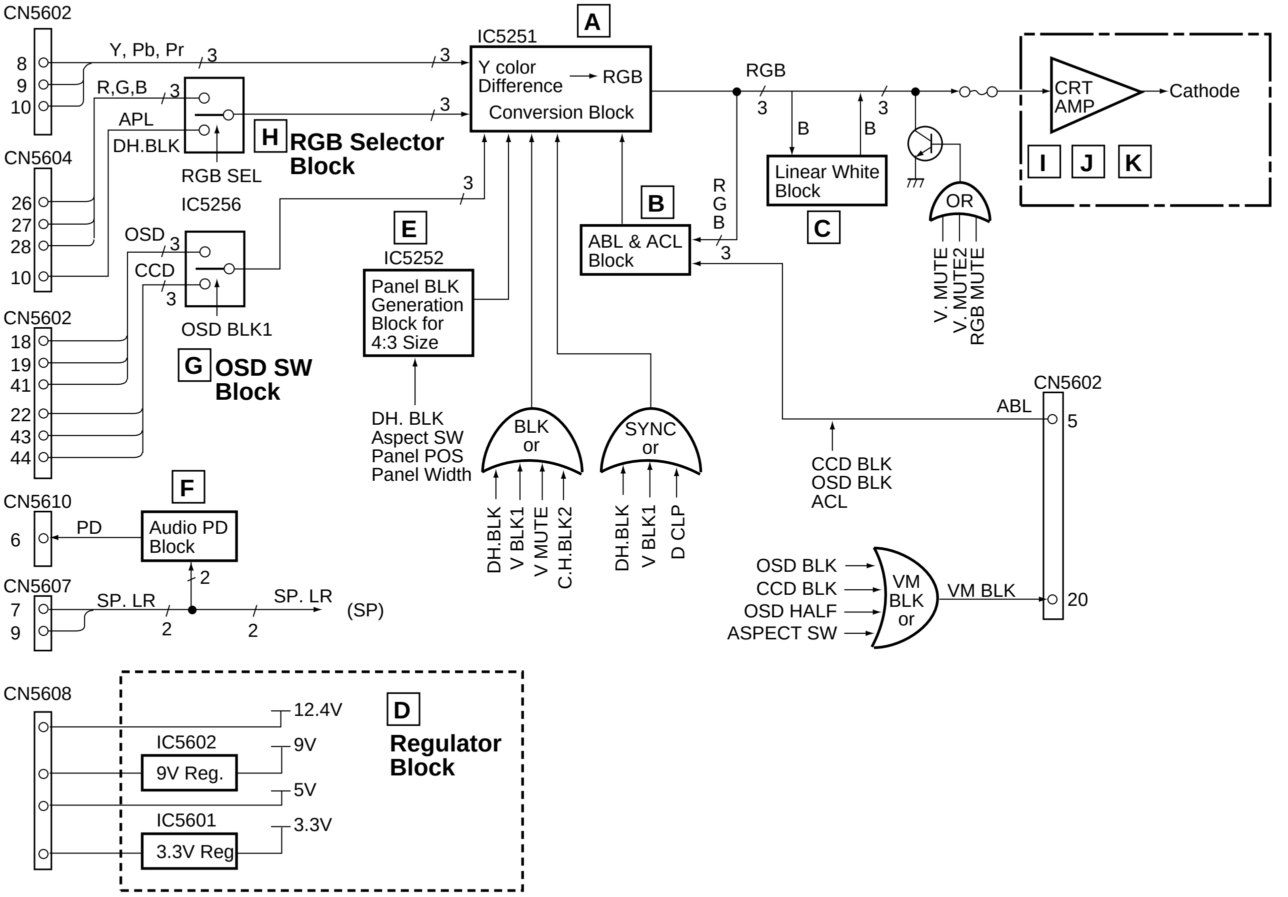


M R CRT DRIVE ASSY



O B CRT DRIVE ASSY

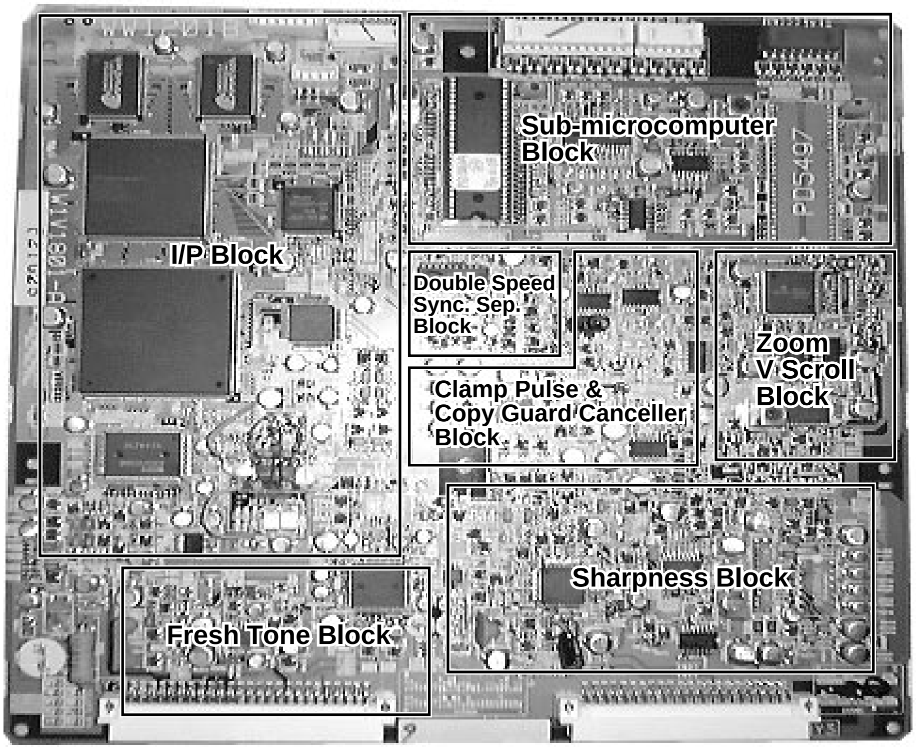
N G CRT DRIVE ASSY


CN5602
8
9
10
Y, Pb, Pr
3
R,G,B
3
APL
DH.BLK
CN5604
26
27
28
10
RGB SEL
IC5256
H RGB Selector Block
OSD
3
CCD
3
OSD BLK1
CN5602
18
19
41
22
43
44
G OSD SW Block
A
IC5251
Y color Difference → RGB
Conversion Block
3
3
3
E
IC5252
Panel BLK Generation Block for 4:3 Size
DH. BLK
Aspect SW
Panel POS
Panel Width
BLK or
DH.BLK
V BLK1
V MUTE
C.H.BLK2
SYNC or
DH.BLK
V BLK1
D CLP
B
ABL & ACL Block
R
G
B
3
RGB
3
B
B
3
Linear White Block
C
OR
V. MUTE
V. MUTE2
RGB MUTE
CRT AMP
Cathode
I
J
K
CN5602
ABL
5
CCD BLK
OSD BLK
ACL
OSD BLK
CCD BLK
OSD HALF
ASPECT SW
VM BLK or
VM BLK
20
F
CN5610
6
PD
Audio PD Block
2
CN5607
7
9
SP. LR
2
SP. LR
2
(SP)
CN5608
12.4V
IC5602
9V Reg.
9V
5V
IC5601
3.3V Reg
3.3V
D
Regulator Block

3.1.6 SUB VIDEO ASSY

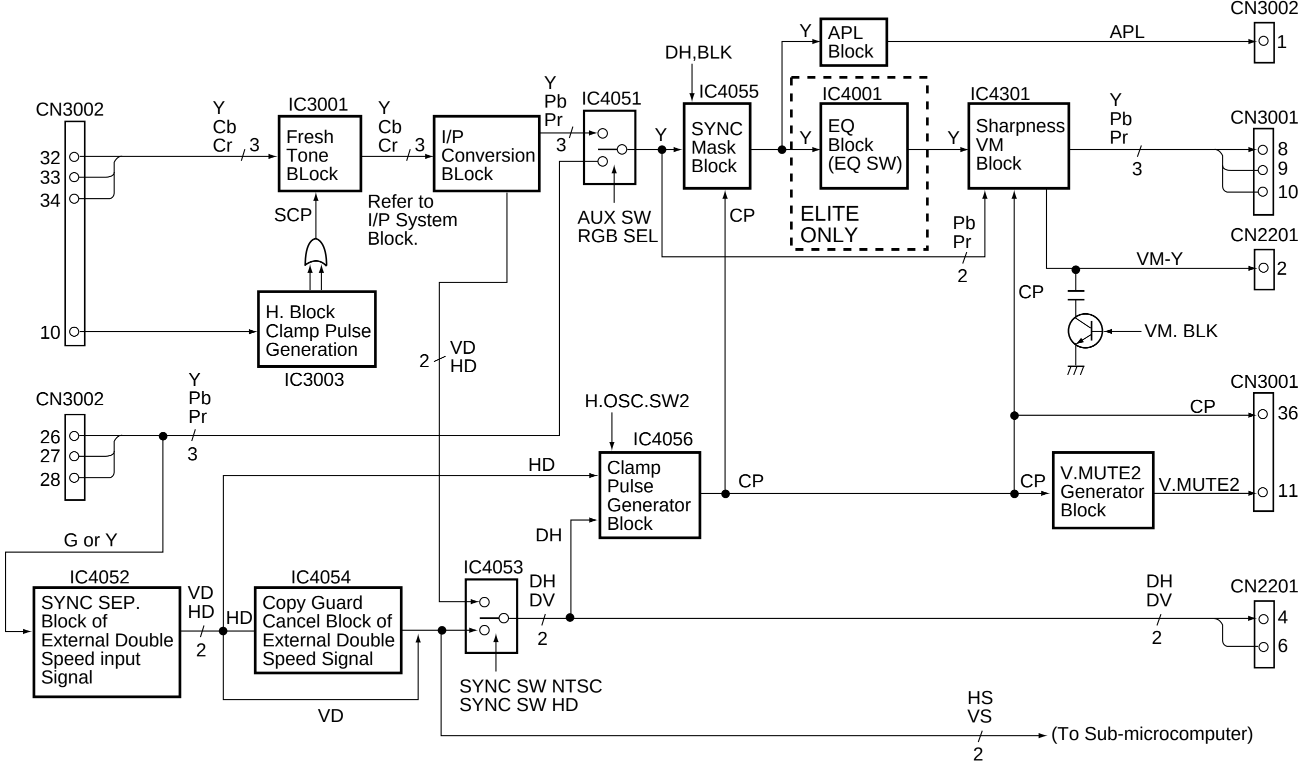
H SUB VIDEO ASSY (ELITE)

Note : SUB VIDEO ASSY of the REGULAR model is the same as that of the ELITE model excepting I/P Block.



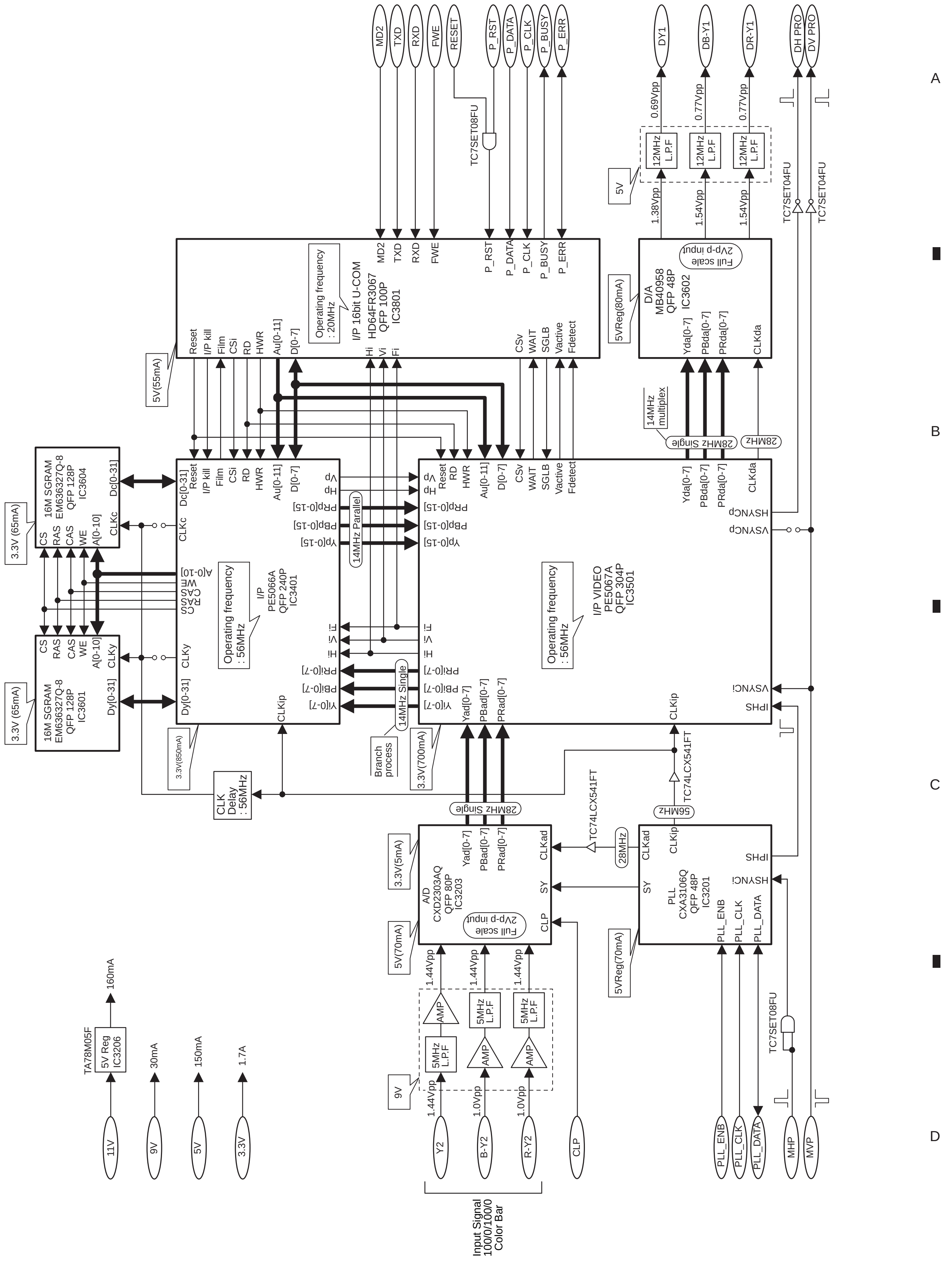
Sub-microcomputer Block
I/P Block
Double Speed Sync. Sep. Block
Zoom V Scroll Block
Clamp Pulse & Copy Guard Canceller Block
Sharpness Block
Fresh Tone Block

● Sub Video Block

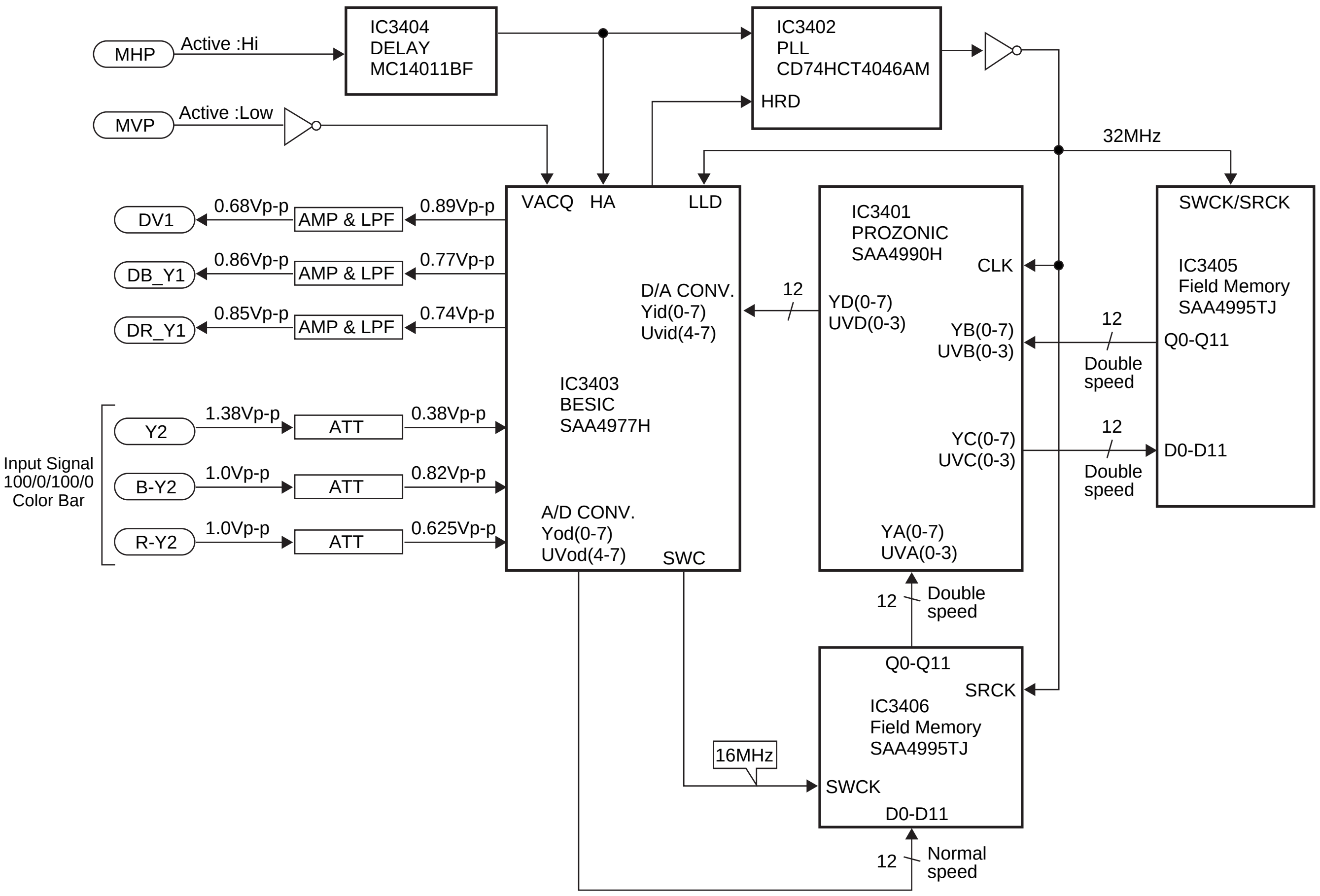


CN3002
32
33
34
10
Y Cb Cr 3
IC3001
Fresh Tone BLock
SCP
H. Block Clamp Pulse Generation
IC3003
Y Cb Cr 3
I/P Conversion BLock
Refer to I/P System Block.
Y Pb Pr 3
IC4051
AUX SW RGB SEL
Y
DH,BLK
IC4055
SYNC Mask Block
CP
Y
APL Block
APL
CN3002
1
IC4001
Y
EQ Block (EQ SW)
ELITE ONLY
Y
IC4301
Sharpness VM Block
Pb Pr 2
Y Pb Pr 3
CN3001
8
9
10
VM-Y
CN2201
2
CP
VM. BLK
2 VD HD
CN3002
26
27
28
Y Pb Pr 3
G or Y
H.OSC.SW2
IC4056
HD
Clamp Pulse Generator Block
CP
DH
CN3001
CP
36
CP
V.MUTE2 Generator Block
V.MUTE2
11
IC4052
SYNC SEP. Block of External Double Speed input Signal
VD HD 2
HD
IC4054
Copy Guard Cancel Block of External Double Speed Signal
VD
IC4053
DH DV 2
SYNC SW NTSC SYNC SW HD
DH DV 2
CN2201
4
6
HS VS 2
(To Sub-microcomputer)

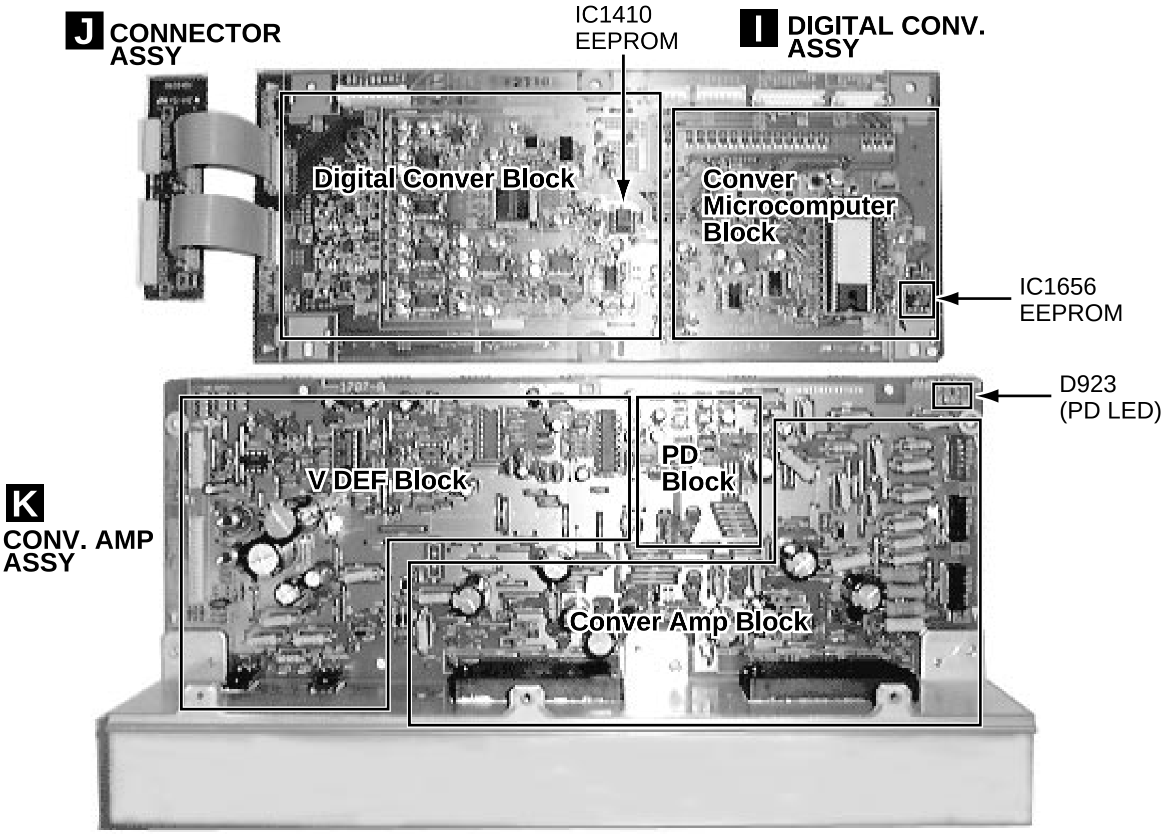
● I/P System Block (ELITE)

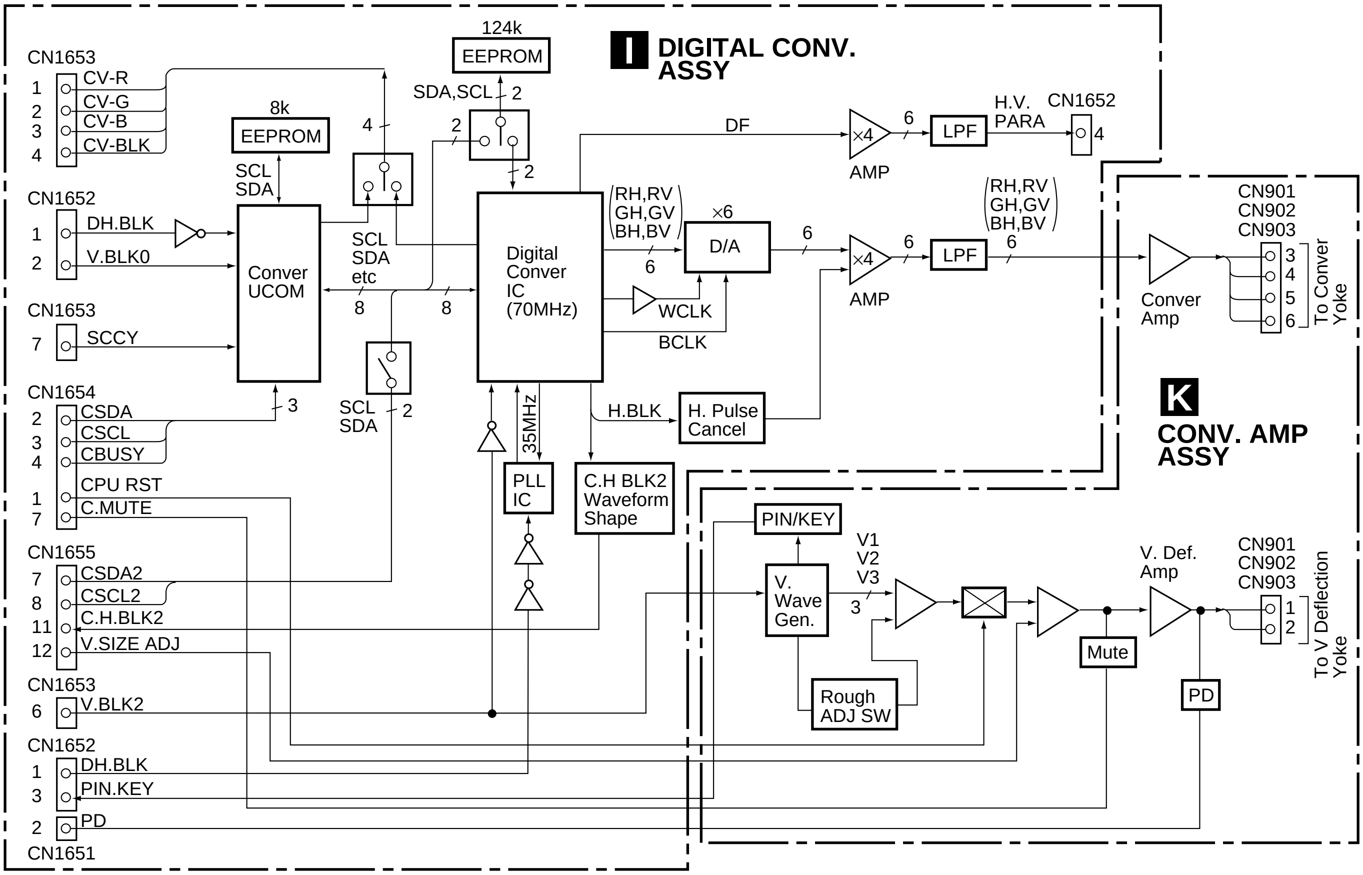

MD2
TXD
RXD
FWE
RESET
P_RST
P_DATA
P_CLK
P_BUSY
P_ERR
DY1
DB-Y1
DR-Y1
DH PRO
DV PRO
TC7SET08FU
0.69Vpp
0.77Vpp
0.77Vpp
12MHz L.P.F
5V
1.38Vpp
1.54Vpp
1.54Vpp
TC7SET04FU
TC7SET04FU
5V(55mA)
Operating frequency : 20MHz
I/P 16bit U-COM
HD64FR3067
QFP 100P
IC3801
Reset
I/P kill
Film
CSi
RD
HWR
Au[0-11]
D[0-7]
Hi
Vi
Fi
CSv
WAIT
SGLB
Vactive
Fdetect
5VReg(80mA)
D/A
MB40958
QFP 48P
IC3602
Full scale 2Vp-p input
Yda[0-7]
PBda[0-7]
PRda[0-7]
CLKda
14MHz multiplex
28MHz Single
28MHz
3.3V (65mA)
16M SGRAM
EM636327Q-8
QFP 128P
IC3604
CS
RAS
CAS
WE
A[0-10]
CLKc
Dc[0-31]
16M SGRAM
EM636327Q-8
QFP 128P
IC3601
CLKy
Dy[0-31]
Vp
Hp
PRp[0-15]
PBp[0-15]
Yp[0-15]
14MHz Parallel
Operating frequency : 56MHz
I/P
PE5066A
QFP 240P
IC3401
PRi[0-7]
PBi[0-7]
Yi[0-7]
14MHz Single
CLKip
3.3V(850mA)
CLK Delay : 56MHz
Branch process
3.3V(700mA)
I/P VIDEO
PE5067A
QFP 304P
IC3501
HSYNCp
VSYNCp
VSYNCi
IPHS
Yad[0-7]
PBad[0-7]
PRad[0-7]
TC74LCX541FT
TC74LCX541FT
56MHz
28MHz
3.3V(5mA)
5V(70mA)
A/D
CXD2303AQ
QFP 80P
IC3203
CLKad
SY
CLP
PLL
CXA3106Q
QFP 48P
IC3201
HSYNCi
PLL_ENB
PLL_CLK
PLL_DATA
5VReg(70mA)
1.44Vpp
AMP
5MHz L.P.F
9V
1.0Vpp
Y2
B-Y2
R-Y2
Input Signal 100/0/100/0 Color Bar
MHP
MVP
TA78M05F
5V Reg IC3206
160mA
30mA
150mA
1.7A
11V
9V
5V
3.3V
A
B
C
D

● I/P System Block (REGULAR)


MHP
Active :Hi
IC3404
DELAY
MC14011BF
IC3402
PLL
CD74HCT4046AM
HRD
MVP
Active :Low
32MHz
DV1
0.68Vp-p
AMP & LPF
0.89Vp-p
DB_Y1
0.86Vp-p
AMP & LPF
0.77Vp-p
DR_Y1
0.85Vp-p
AMP & LPF
0.74Vp-p
VACQ
HA
LLD
D/A CONV.
Yid(0-7)
Uvid(4-7)
IC3403
BESIC
SAA4977H
A/D CONV.
Yod(0-7)
UVod(4-7)
SWC
12
IC3401
PROZONIC
SAA4990H
CLK
YD(0-7)
UVD(0-3)
YB(0-7)
UVB(0-3)
YC(0-7)
UVC(0-3)
YA(0-7)
UVA(0-3)
SWCK/SRCK
IC3405
Field Memory
SAA4995TJ
Q0-Q11
D0-D11
12
Double speed
12
Double speed
Input Signal
100/0/100/0
Color Bar
Y2
1.38Vp-p
ATT
0.38Vp-p
B-Y2
1.0Vp-p
ATT
0.82Vp-p
R-Y2
1.0Vp-p
ATT
0.625Vp-p
12
Double speed
Q0-Q11
SRCK
IC3406
Field Memory
SAA4995TJ
16MHz
SWCK
D0-D11
12
Normal speed

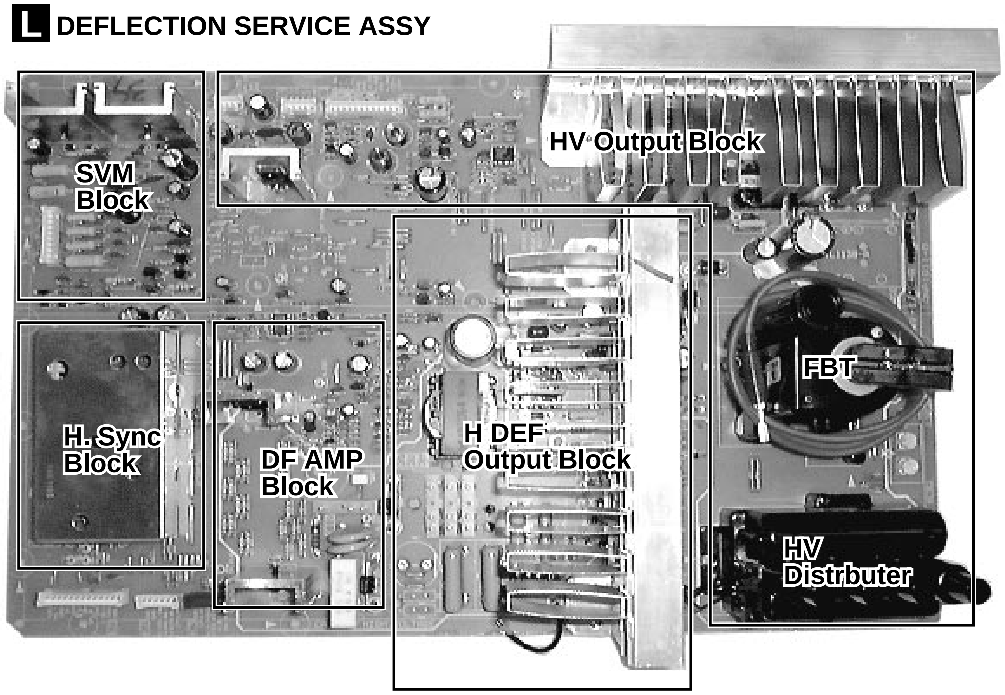
3.1.7 DIGITAL CONV., CONNECTOR and CONV. AMP ASSYS

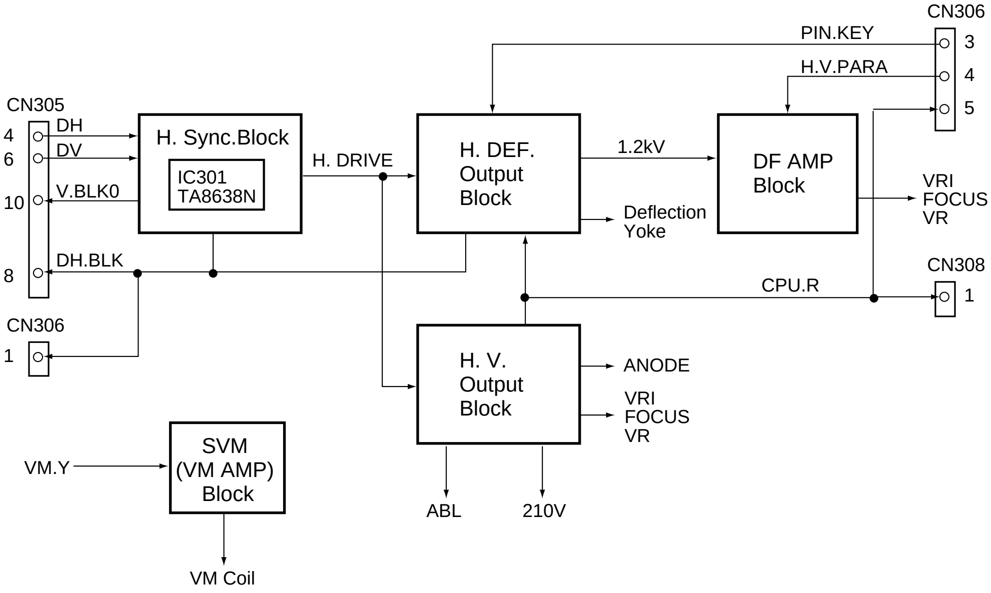

J CONNECTOR ASSY
IC1410 EEPROM
I DIGITAL CONV. ASSY
Digital Conver Block
Conver Microcomputer Block
IC1656 EEPROM
D923 (PD LED)
K CONV. AMP ASSY
V DEF Block
PD Block
Conver Amp Block


I DIGITAL CONV. ASSY
CN1653
1 CV-R
2 CV-G
3 CV-B
4 CV-BLK
CN1652
1 DH.BLK
2 V.BLK0
CN1653
7 SCCY
CN1654
2 CSDA
3 CSCL
4 CBUSY
1 CPU RST
7 C.MUTE
CN1655
7 CSDA2
8 CSCL2
11 C.H.BLK2
12 V.SIZE ADJ
CN1653
6 V.BLK2
CN1652
1 DH.BLK
3 PIN.KEY
2 PD
CN1651
8k EEPROM
SCL SDA
Conver UCOM
124k EEPROM
SDA,SCL 2
4
2
2
SCL SDA etc
8
8
3
SCL SDA 2
Digital Conver IC (70MHz)
35MHz
PLL IC
C.H BLK2 Waveform Shape
H.BLK
H. Pulse Cancel
DF
×4 AMP
6
LPF
H.V. PARA
CN1652 4
(RH,RV GH,GV BH,BV)
6
×6
D/A
WCLK
BCLK
6
×4 AMP
6
LPF
(RH,RV GH,GV BH,BV)
6
Conver Amp
CN901 CN902 CN903
3 4 5 6
To Conver Yoke
K CONV. AMP ASSY
PIN/KEY
V. Wave Gen.
V1 V2 V3
3
Rough ADJ SW
Mute
V. Def. Amp
PD
CN901 CN902 CN903
1 2
To V Deflection Yoke

3.1.8 DEFLECTION SERVICE ASSY

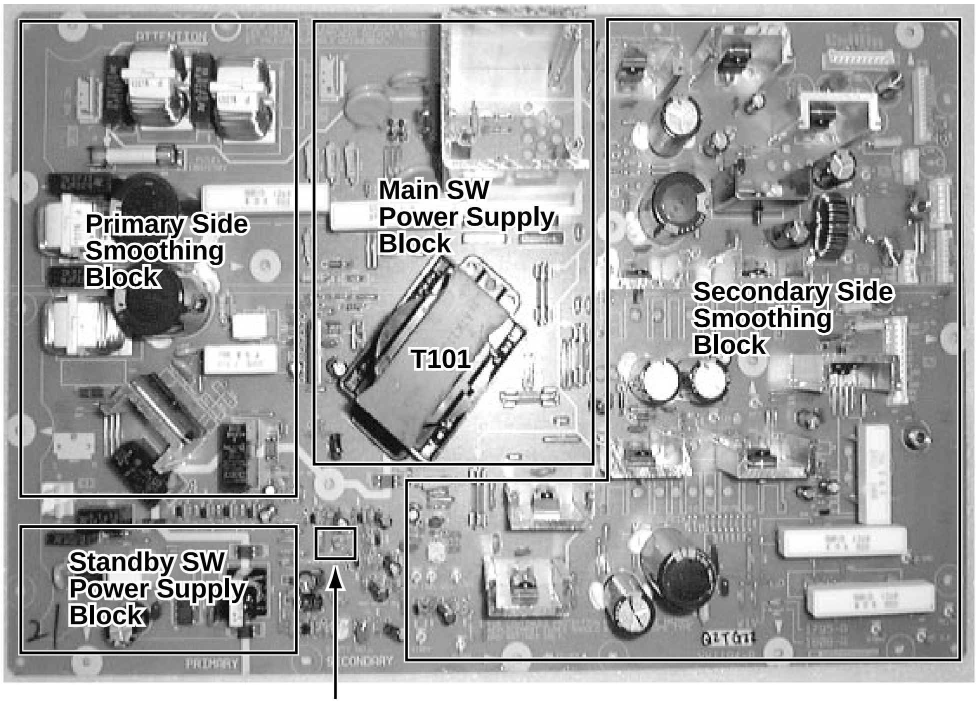
L DEFLECTION SERVICE ASSY


SVM Block
HV Output Block
H. Sync Block
DF AMP Block
H DEF Output Block
FBT
HV Distrbuter

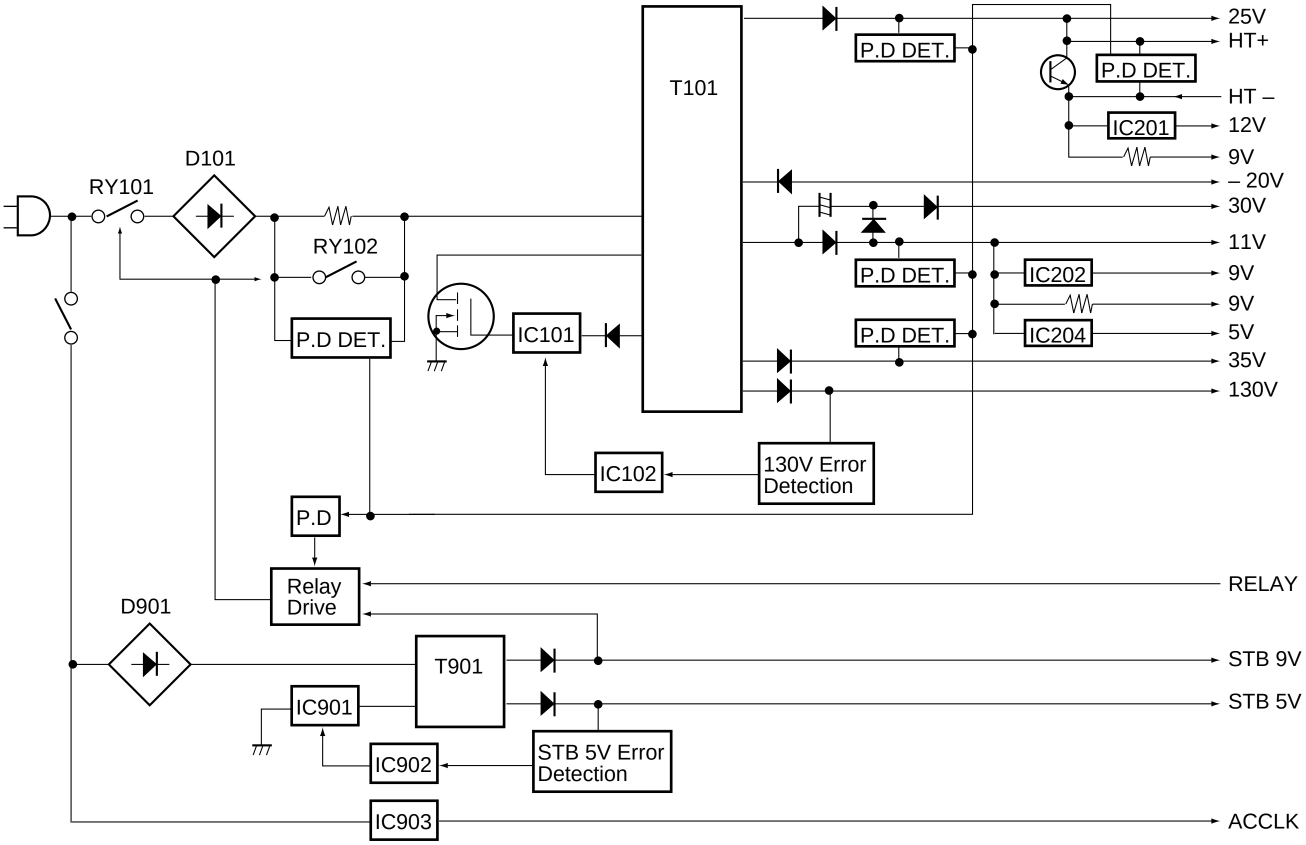

CN306
PIN.KEY
3
H.V.PARA
4
5
CN305
4
DH
6
DV
10
V.BLK0
8
DH.BLK
H. Sync.Block
IC301
TA8638N
H. DRIVE
H. DEF.
Output
Block
1.2kV
Deflection
Yoke
DF AMP
Block
VRI
FOCUS
VR
CN308
CPU.R
1
CN306
1
H. V.
Output
Block
ANODE
VRI
FOCUS
VR
ABL
210V
VM.Y
SVM
(VM AMP)
Block
VM Coil

3.1.9 POWER SUPPLY SERVICE ASSY

P POWER SUPPLY SERVICE ASSY


Primary Side Smoothing Block
Main SW Power Supply Block
T101
Secondary Side Smoothing Block
Standby SW Power Supply Block
ATTENTION
PRIMARY
SECONDARY

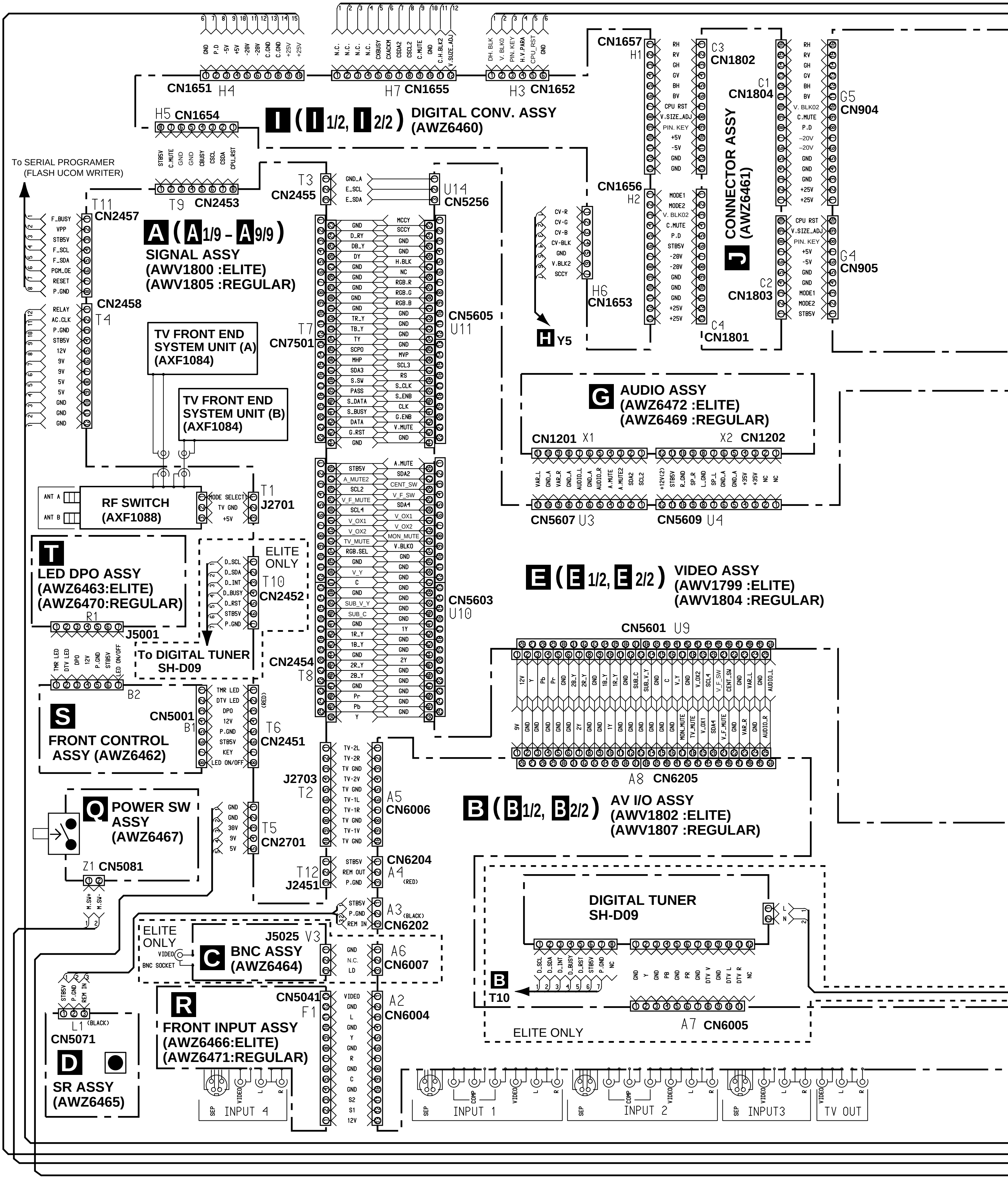
D923
(PD LED)


T101
D101
RY101
RY102
P.D DET.
P.D DET.
P.D DET.
P.D DET.
P.D DET.
IC101
IC102
IC201
IC202
IC204
130V Error Detection
P.D
Relay Drive
D901
T901
IC901
IC902
IC903
STB 5V Error Detection
25V
HT+
HT –
12V
9V
– 20V
30V
11V
9V
9V
5V
35V
130V
RELAY
STB 9V
STB 5V
ACCLK

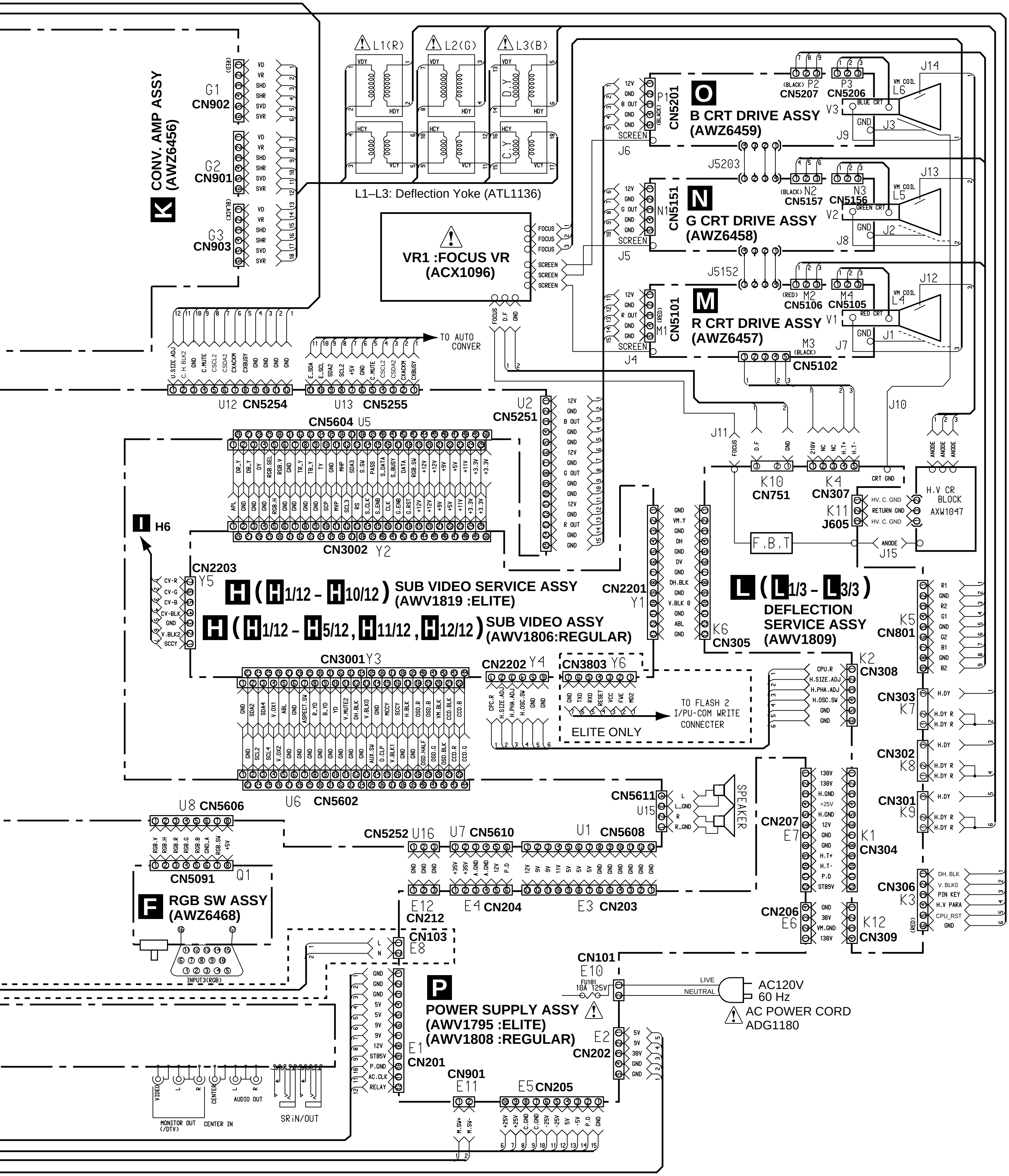
PRO-610HD, PRO-510HD, SD-582HD5, SD-532HD5

3.2 OVERALL CONNECTION DIAGRAM

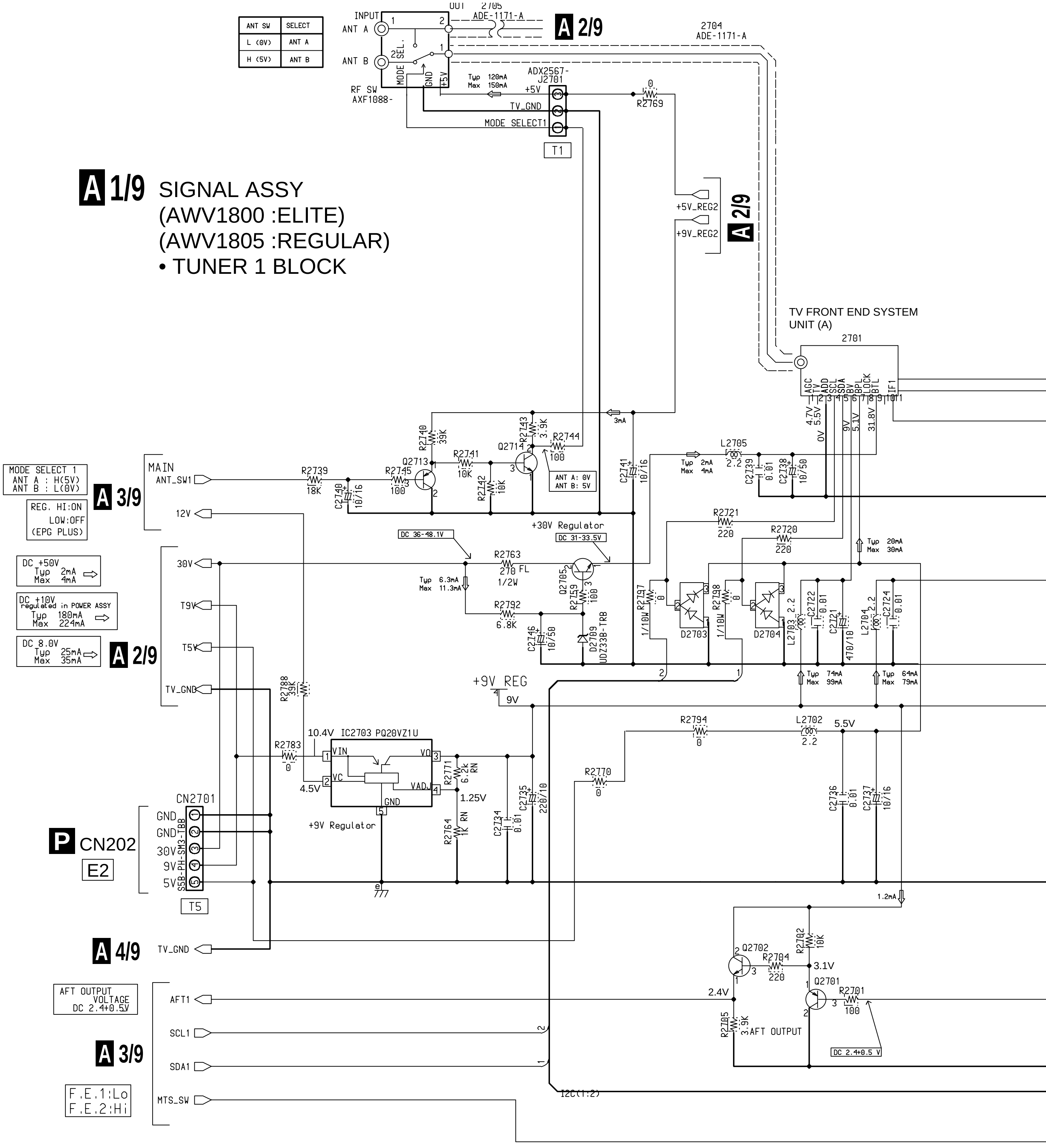
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".


I (I 1/2, I 2/2) DIGITAL CONV. ASSY (AWZ6460)
CN1651 H4
CN1655 H7
CN1652 H3
CN1654 H5
CN2453 T9
CN1657 H1
CN1656 H2
CN1653 H6
C3 CN1802
C1 CN1804
C2 CN1803
C4 CN1801
G5 CN904
G4 CN905
J CONNECTOR ASSY (AWZ6461)
H Y5
To SERIAL PROGRAMER (FLASH UCOM WRITER)
T11 CN2457
T4 CN2458
T3 CN2455
U14 CN5256
A (A 1/9 – A 9/9) SIGNAL ASSY (AWV1800 :ELITE) (AWV1805 :REGULAR)
TV FRONT END SYSTEM UNIT (A) (AXF1084)
TV FRONT END SYSTEM UNIT (B) (AXF1084)
T7 CN7501
CN5605 U11
G AUDIO ASSY (AWZ6472 :ELITE) (AWZ6469 :REGULAR)
CN1201 X1
X2 CN1202
CN5607 U3
CN5609 U4
ANT A
ANT B
RF SWITCH (AXF1088)
T1 J2701
T LED DPO ASSY (AWZ6463:ELITE) (AWZ6470:REGULAR)
R1 J5001
ELITE ONLY
T10 CN2452
To DIGITAL TUNER SH-D09
CN2454 T8
CN5603 U10
E (E 1/2, E 2/2) VIDEO ASSY (AWV1799 :ELITE) (AWV1804 :REGULAR)
CN5601 U9
A8 CN6205
B2
S FRONT CONTROL ASSY (AWZ6462)
CN5001 B1
T6 CN2451
J2703 T2
A5 CN6006
B (B 1/2, B 2/2) AV I/O ASSY (AWV1802 :ELITE) (AWV1807 :REGULAR)
Q POWER SW ASSY (AWZ6467)
T5 CN2701
Z1 CN5081
T12 J2451
CN6204 A4
A3 CN6202
ELITE ONLY
C BNC ASSY (AWZ6464)
J5025 V3
A6 CN6007
DIGITAL TUNER SH-D09
B T10
A7 CN6005
ELITE ONLY
L1 CN5071
D SR ASSY (AWZ6465)
R FRONT INPUT ASSY (AWZ6466:ELITE) (AWZ6471:REGULAR)
CN5041 F1
A2 CN6004
INPUT 4
INPUT 1
INPUT 2
INPUT3
TV OUT

Note : Model names indicated by "ELITE" and "REGULAR" are as follows:
ELITE : PRO-610HD and PRO-510HD, REGULAR : SD-582HD5 and SD-532HD5


K CONV. AMP ASSY (AWZ6456)
G1 CN902
G2 CN901
G3 CN903
VD VR SHD SHR SVD SVR
(RED) (BLUE)
L1(R) L2(G) L3(B)
VDY HDY HCY VCY D.Y C.Y
L1–L3: Deflection Yoke (ATL1136)
VR1 :FOCUS VR (ACX1096)
FOCUS FOCUS FOCUS SCREEN SCREEN SCREEN
FOCUS D.F GND
TO AUTO CONVER
U.SIZE.ADJ C.H.BLK2 GND C.MUTE CSCL2 CSDA2 CXACKM CXBUSY GND GND GND GND
E.SDA E.SCL SDA2 SCL2 +5V GND C.MUTE CSCL2 CSDA2 CXACKM CXBUSY
U12 CN5254
U13 CN5255
O B CRT DRIVE ASSY (AWZ6459)
N G CRT DRIVE ASSY (AWZ6458)
M R CRT DRIVE ASSY (AWZ6457)
P1 CN5201 (BLACK)
N1 CN5151
M1 CN5101 (RED)
12V GND B OUT GND GND SCREEN
12V GND G OUT GND GND SCREEN
12V GND R OUT GND GND SCREEN
J6 J5 J4
J5203 J5152
(BLACK) P2 CN5207 P3 CN5206
(BLACK) N2 CN5157 N3 CN5156
(RED) M2 CN5106 M4 CN5105
M3 (BLACK) CN5102
V3 V2 V1 BLUE CRT GREEN CRT RED CRT GND
J3 J2 J1 J9 J8 J7
VM COIL L6 L5 L4
J14 J13 J12
U2 CN5251
12V GND B OUT GND GND GND 12V G OUT GND GND 12V R OUT GND GND
CN5604 U5
DR.Y DB.Y DY RGB.SEL RGB.V GND TR.Y TB.Y TY GND MHP SDA3 S.SW PASS S.DATA S.BUSY DATA RGB.SW +12V +12V +9V +5V +5V +11V +3.3V +3.3V
APL GND GND GND RGB.H GND GND GND GND SCP MVP SCL3 RS S.CLK S.ENB CLK G.ENB G.RST +12V +12V +9V +5V +11V +3.3V +3.3V
CN3002 Y2
I H6
CN2203 Y5
CV-R CV-G CV-B CV-BLK GND V.BLK2 SCCY
H (H1/12 – H10/12) SUB VIDEO SERVICE ASSY (AWV1819 :ELITE)
H (H1/12 – H5/12, H11/12, H12/12) SUB VIDEO ASSY (AWV1806:REGULAR)
CN2201 Y1
GND VM.Y GND DH GND DV GND DH.BLK GND V.BLK 0 GND ABL GND
K6 CN305
J11 FOCUS D.F GND
210V NC NC H.T+ H.T-
J10
K10 CN751
K4 CN307
CRT GND
K11 J605
HV. C. GND RETURN GND HV. C. GND
H.V CR BLOCK AXW1047
ANODE ANODE ANODE
F.B.T
ANODE J15
L (L1/3 – L3/3) DEFLECTION SERVICE ASSY (AWV1809)
K5 CN801
R1 GND R2 G1 GND G2 B1 GND B2
K2 CN308
CPU.R H.SIZE.ADJ H.PHA.ADJ H.OSC.SW GND GND
CN303 K7 H.DY H.DY R H.DY R
CN302 K8 H.DY H.DY R H.DY R
CN301 K9 H.DY H.DY R H.DY R
CN3001 Y3
GND SDA2 SDA4 V.DX1 ABL GND ASPECT.SW R.YD B.YD YD V.MUTE2 DH.BLK V.BLKO GND MCCY SCCY H.BLK OSD.R OSD.B VM.BLK CCD.BLK CCD.B
GND SCL2 SCL4 V.DX2 GND GND GND GND GND GND GND GND GND AUX.SW D.CLP V.BLK1 GND GND OSD.HALF OSD.G OSD.BLK CCD.R CCD.G
U6 CN5602
CN2202 Y4
CPC.R H.SIZE.ADJ H.PHA.ADJ H.OSC.SW GND GND
CN3803 Y6
GND TXD RXD RESET VCC FWE MD2
TO FLASH 2 I/PU-COM WRITE CONNECTER
ELITE ONLY
CN5611 U15
L L_GND R R_GND
SPEAKER
U8 CN5606
RGB.V RGB.H RGB.R RGB.G RGB.B GND_A RGB.SW +5V
CN5091 Q1
F RGB SW ASSY (AWZ6468)
INPUT3(RGB)
CN5252 U16
U7 CN5610
U1 CN5608
GND GND GND
+35V +35V A.GND A.GND 12V P.D
12V 9V 9V 11V 5V 5V 5V GND GND GND GND GND GND
E12 CN212
E4 CN204
E3 CN203
CN207 E7
130V 130V H.GND +25V H.GND 12V GND GND H.T+ H.T- P.D STB9V
K1 CN304
CN306 K3
DH. BLK V. BLK0 PIN KEY H.V PARA CPU_RST GND (RED)
CN206 E6
GND 30V VM.GND 130V
K12 CN309
CN103 E8
L N
CN101 E10
FU101 10A 125V
LIVE NEUTRAL
AC120V 60 Hz
AC POWER CORD ADG1180
P POWER SUPPLY ASSY (AWV1795 :ELITE) (AWV1808 :REGULAR)
GND GND GND 5V 5V 9V 9V 12V STB5V P.GND AC.CLK RELAY
E1 CN201
E2 CN202
5V 9V 30V GND GND
CN901 E11
M.SW+ M.SW-
E5 CN205
+25V +25V C.GND C.GND -25V -25V 5V -5V P.D GND
VIDEO L R CENTER L R AUDIO OUT
MONITOR OUT (/DTV) CENTER IN
SRiN/OUT
A B C D

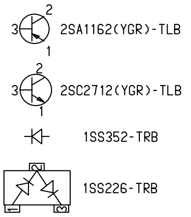
3.3 SIGNAL ASSY (1/9)



A 1/9 SIGNAL ASSY
(AWV1800 :ELITE)
(AWV1805 :REGULAR)
• TUNER 1 BLOCK

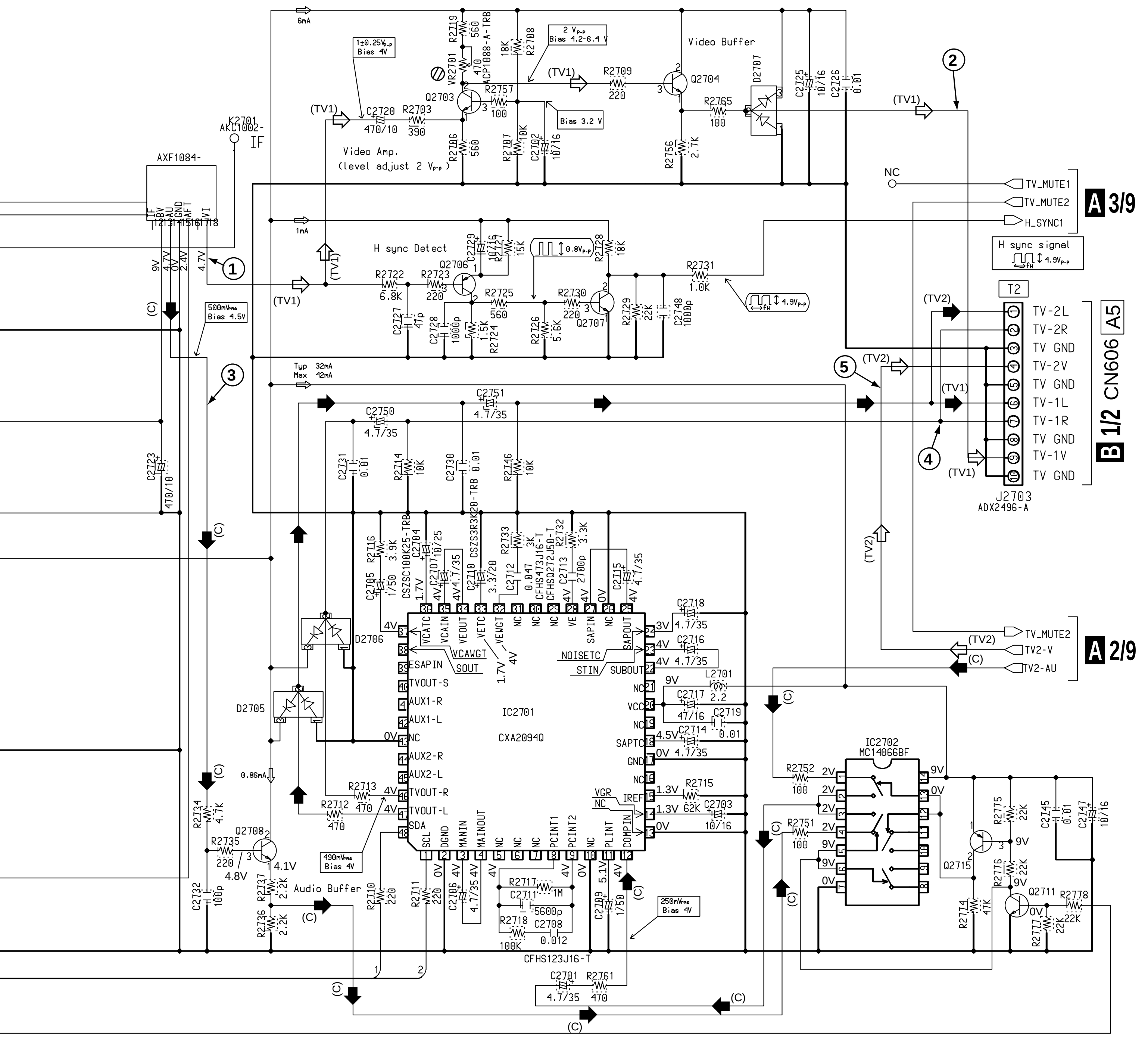
A
B
C
D
ANT SW
SELECT
L (0V)
ANT A
H (5V)
ANT B
INPUT
ANT A
ANT B
OUT
2705
ADE-1171-A
A 2/9
2704
ADE-1171-A
SEL.
MODE
GND
+5V
RF SW
AXF1088-
Typ 120mA
Max 150mA
ADX2567-
J2701
+5V
TV_GND
MODE SELECT1
T1
0
R2769
+5V_REG2
+9V_REG2
A 2/9
TV FRONT END SYSTEM
UNIT (A)
2701
AGC
TV
ADD
SCL
SDA
BV
BPL
LOCK
BTL
IF1
4.7V
5.5V
0V
9V
5.1V
31.8V
3mA
R2740
39K
R2743
3.9K
R2744
100
Q2714
R2741
10K
Q2713
R2739
18K
R2745
100
C2740
10/16
R2742
10K
ANT A: 0V
ANT B: 5V
C2741
10/16
L2705
2.2
Typ 2mA
Max 4mA
C2739
0.01
C2738
10/50
MODE SELECT 1
ANT A : H(5V)
ANT B : L(0V)
MAIN
ANT_SW1
A 3/9
REG. HI:ON
LOW:OFF
(EPG PLUS)
12V
+30V Regulator
DC 36-48.1V
DC 31-33.5V
R2721
220
R2720
220
Typ 20mA
Max 30mA
DC +50V
Typ 2mA
Max 4mA
30V
R2763
270 FL
1/2W
Q2705
R2759
100
Typ 6.3mA
Max 11.3mA
DC +10V
regulated in POWER ASSY
Typ 180mA
Max 224mA
T9V
R2792
6.8K
C2746
10/50
D2709
UDZ33B-TRB
R2797
0
1/10W
D2703
R2798
0
1/10W
D2704
L2703
2.2
C2722
0.01
C2721
470/10
L2704
2.2
C2724
0.01
DC 8.0V
Typ 25mA
Max 35mA
T5V
A 2/9
TV_GND
R2788
39K
+9V REG
9V
Typ 74mA
Max 99mA
Typ 64mA
Max 79mA
10.4V
IC2703 PQ20VZ1U
R2783
0
VIN
VO
VC
VADJ
GND
4.5V
R2771
6.2k RN
1.25V
R2764
1K RN
C2734
0.01
C2735
220/10
+9V Regulator
R2794
0
L2702
2.2
5.5V
R2770
0
C2736
0.01
C2737
10/16
CN2701
GND
GND
30V
9V
5V
S5B-PH-SM3-TBB
P CN202
E2
T5
1.2mA
A 4/9
TV_GND
Q2702
R2702
10K
R2704
220
3.1V
Q2701
R2701
100
2.4V
R2705
3.9K
AFT OUTPUT
DC 2.4+0.5 V
AFT OUTPUT
VOLTAGE
DC 2.4+0.5V
AFT1
SCL1
SDA1
MTS_SW
A 3/9
F.E.1:Lo
F.E.2:Hi
I2C(1:2)

Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k Ω
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless
otherwise noted p pF
Indication without voltage is 50V except electrolytic capacitor.



2SA1162(YGR)-TLB
2SC2712(YGR)-TLB
1SS352-TRB
1SS226-TRB

(C) ➡ : COMPOSITE AUDIO SIGNAL ROUTE
(TV1) ⇨ : VIDEO SIGNAL ROUTE (TV1)
(TV2) ⇨ : VIDEO SIGNAL ROUTE (TV2)
➡ : AUDIO SIGNAL ROUTE
(TV1) ➡ : AUDIO SIGNAL ROUTE (TV1)
(TV2) ➡ : AUDIO SIGNAL ROUTE (TV2)



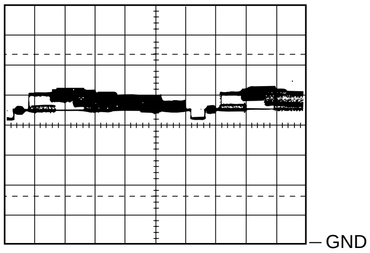
AXF1084-
K2701 AKC1002- IF
IF BV AU GND AFT VI
9V 4.7V 0V 2.4V 4.7V
6mA
1mA
Typ 32mA Max 42mA
1±0.25Vp-p Bias 4V
2 Vp-p Bias 4.2-6.4 V
Bias 3.2 V
Video Amp. (level adjust 2 Vp-p)
Video Buffer
H sync Detect
500mVrms Bias 4.5V
490mVrms Bias 4V
250mVrms Bias 4V
Audio Buffer
0.86mA
R2719 560
VR2701 470 ACP1088-A-TRB
R2708 18K
R2709 220
R2757 100
R2703 390
C2720 470/10
R2706 560
R2707 10K
C2702 10/16
R2756 2.7K
R2765 100
C2725 10/16
C2726 0.01
Q2703
Q2704
D2707
R2722 6.8K
R2723 220
Q2706
C2729 10/16
R2727 15K
R2728 18K
0.8Vp-p
R2731 1.0K
4.9Vp-p
R2725 560
R2730 220
Q2707
C2727 47p
C2728 1000p
R2724 1.5K
R2726 5.6K
R2729 22K
C2748 1000p
C2751 4.7/35
C2750 4.7/35
C2723 470/10
C2731 0.01
R2714 10K
C2730 0.01
R2746 10K
R2716 3.9K
CSZSC100K25-TRB
C2705 1/50
C2704 10/25
C2707 4.7/35
CSZS3R3K20-TRB
C2710 3.3/20
R2733 3K
C2712 0.047
CFHS473J16-T
C2713 2700p
CFHSQ272J50-T
R2732 3.3K
C2715 4.7/35
IC2701
CXA2094Q
VCATC VCAIN VEOUT VETC VEWGT NC NC NC VE SAPIN NC SAPOUT
VCAWGT SOUT NOISETC STIN SUBOUT
ESAPIN TVOUT-S AUX1-R AUX1-L NC AUX2-R AUX2-L TVOUT-R TVOUT-L SDA
SCL DGND MANIN MAINOUT NC NC NC PCINT1 PCINT2 NC PLINT COMPIN
NC VCC NC SAPTC GND NC IREF VGR NC
C2718 4.7/35
C2716 4.7/35
L2701 2.2
C2717 47/16
C2719 0.01
C2714 4.7/35
R2715 62K
C2703 10/16
D2706
D2705
R2713 470
R2712 470
R2734 4.7K
R2735 220
Q2708
C2732 100p
R2737 2.2K
R2736 2.2K
R2710 220
R2711 220
C2706 4.7/35
R2717 1M
C2711 5600p
R2718 100K
C2708 0.012
C2709 1/50
CFHS123J16-T
C2701 4.7/35
R2761 470
IC2702 MC14066BF
R2752 100
R2751 100
R2775 22K
C2745 0.01
C2747 10/16
Q2715
R2776 22K
Q2711
R2778 22K
R2774 47K
R2777 22K
NC
TV_MUTE1
TV_MUTE2
H_SYNC1
A 3/9
H sync signal 4.9Vp-p fH
T2
TV-2L TV-2R TV GND TV-2V TV GND TV-1L TV-1R TV GND TV-1V TV GND
J2703 ADX2496-A
B 1/2 CN606 A5
TV_MUTE2 TV2-V TV2-AU
A 2/9
(TV1) (TV2) (C)
① ② ③ ④ ⑤

3.4 SIGNAL ASSY (2/9)

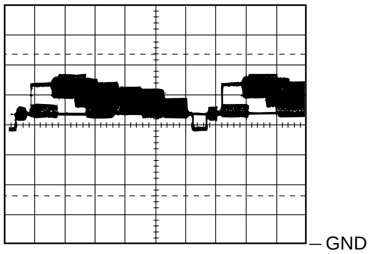
A 1/9 SIGNAL ASSY (1/9)

Input signal
Video signal : EIA full color-bar
Picture quality : Standard
Range :DC range (Unless otherwise noted)

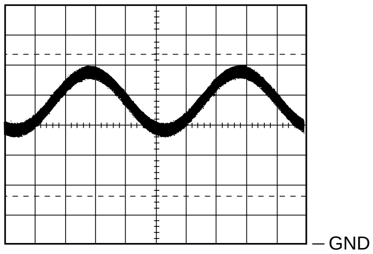
① **2701-pin 18**
V: 1V/div. H: 10µsec/div.



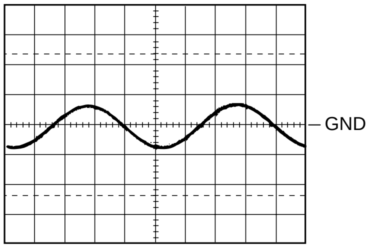
② **J2703-pin 9**
V: 1V/div. H: 10µsec/div.



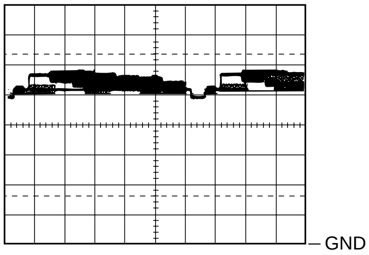
③ **2701-pin 14**
V: 1V/div. H: 200µsec/div.

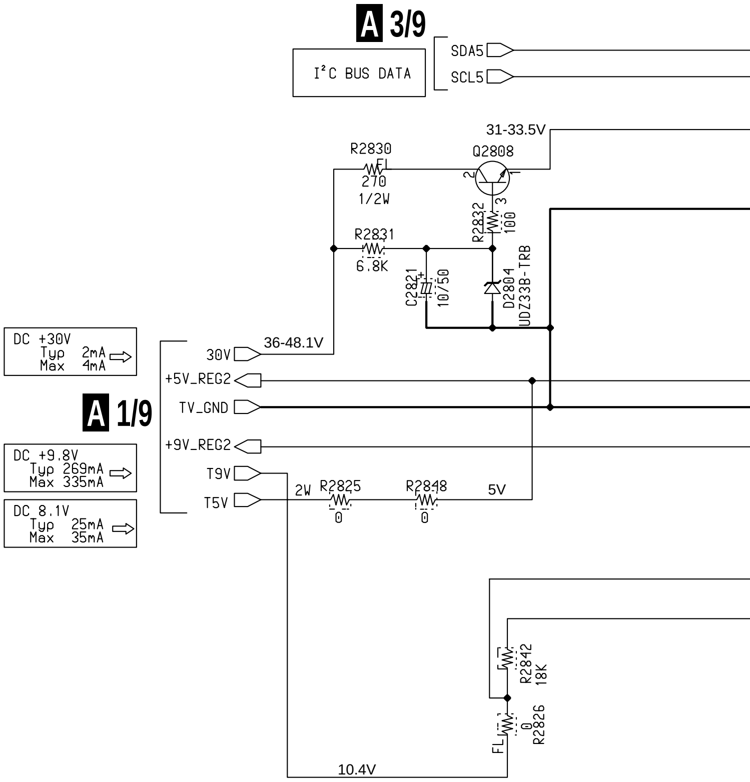


④ **J2703-pin 2, 7**
V: 1V/div. H: 200µsec/div.



⑤ **J2703-pin 4**
V: 1V/div. H: 10µsec/div.

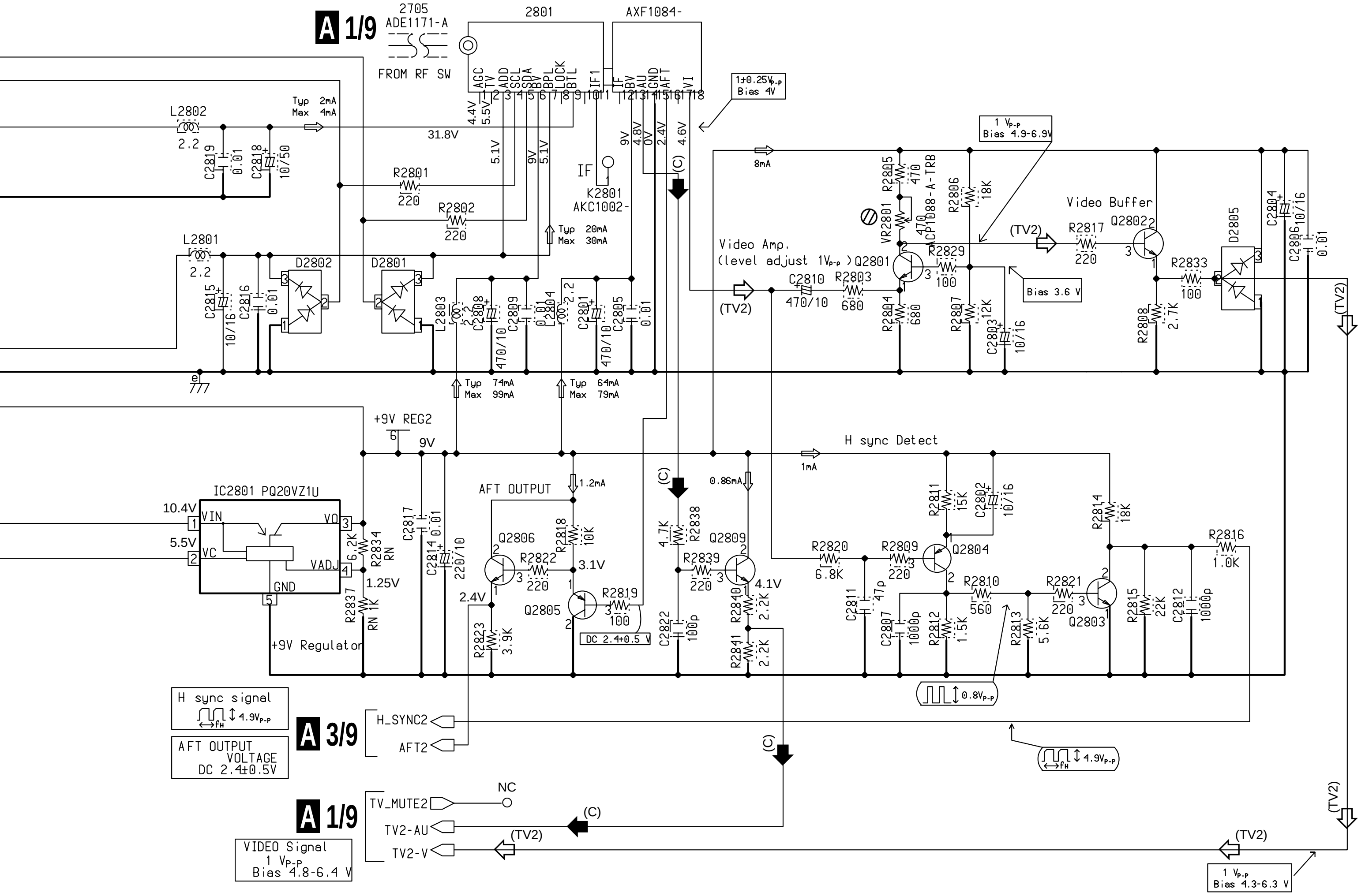



A 3/9
I²C BUS DATA
SDA5
SCL5
31-33.5V
R2830
FL
270
1/2W
Q2808
2
3
1
R2832
100
R2831
6.8K
C2821
10/50
D2804
UDZ33B-TRB
DC +30V
Typ 2mA
Max 4mA
36-48.1V
30V
+5V_REG2
TV_GND
A 1/9
+9V_REG2
T9V
T5V
DC +9.8V
Typ 269mA
Max 335mA
DC 8.1V
Typ 25mA
Max 35mA
2W
R2825
0
R2848
0
5V
R2842
18K
FL
R2826
0
10.4V

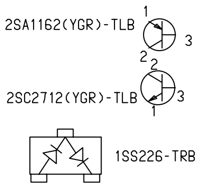
A 2/9 SIGNAL ASSY
(AWV1800 :ELITE)
(AWV1805 :REGULAR)
• TUNER 2 BLOCK

(TV2) ⇨ : VIDEO SIGNAL ROUTE (TV2)
(C) ➡ : COMPOSITE AUDIO SIGNAL ROUTE

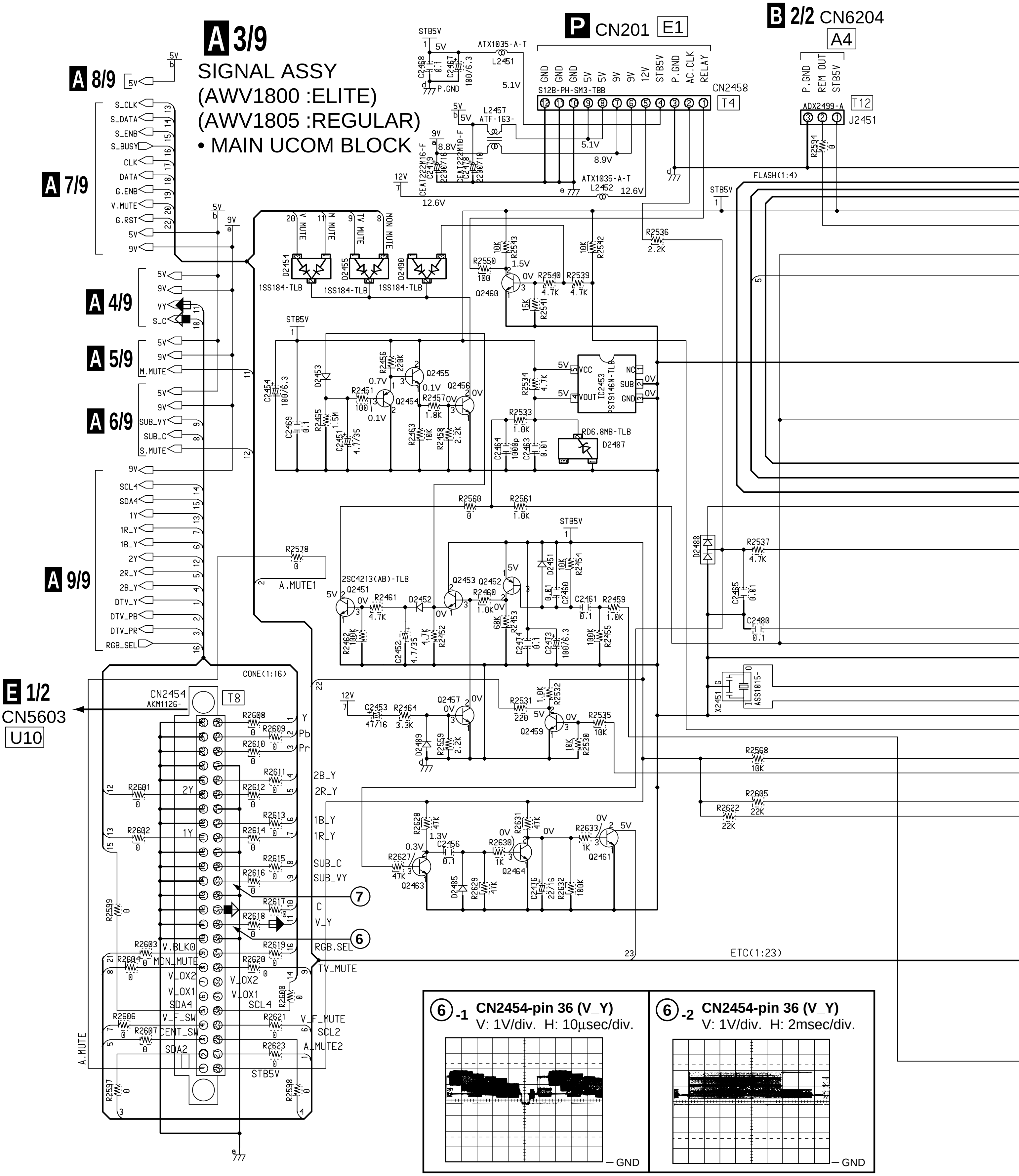
A B C D


A 1/9
2705
ADE1171-A
FROM RF SW
2801
AXF1084-
AGC TV ADD SCL SDA BPL LOCK BTL IF1 IF BV AU GND AFT VI
1:0.25Vp-p Bias 4V
L2802 2.2
Typ 2mA Max 4mA
31.8V
4.4V 5.5V 5.1V 9V 5.1V
9V 4.8V 0V 2.4V 4.6V
C2819 0.01
C2818 10/50
R2801 220
R2802 220
IF
K2801
AKC1002-
Typ 20mA Max 30mA
L2801 2.2
D2802
D2801
C2815 10/16
C2816 0.01
L2803
C2808
C2809 470/10
C2804 0.01
L2804 2.2
C2801 470/10
C2805 0.01
Typ 74mA Max 99mA
Typ 64mA Max 79mA
8mA
1 Vp-p Bias 4.9-6.9V
R2805 470
VR2801 CP1088-A-TRB 470
R2806 18K
Video Buffer
Q2802
R2817 220
(TV2)
D2805
C2804 10/16
C2806 0.01
Video Amp.
(level adjust 1Vp-p) Q2801
C2810 470/10
R2803 680
R2829 100
Bias 3.6 V
R2833 100
(TV2)
R2804 680
R2807 12K
C2803 10/16
R2808 2.7K
+9V REG2
9V
H sync Detect
1mA
IC2801 PQ20VZ1U
10.4V VIN VO
5.5V VC VADJ
GND
+9V Regulator
R2834 6.2K RN
1.25V
R2837 1K RN
C2817 0.01
C2814 220/10
AFT OUTPUT
1.2mA
Q2806
R2818 10K
R2822 220
3.1V
2.4V
Q2805
R2819 100
DC 2.4±0.5 V
R2823 3.9K
(C)
0.86mA
R2838 4.7K
Q2809
R2839 220
4.1V
R2840 2.2K
C2822 100p
R2841 2.2K
R2811 15K
C2802 10/16
R2814 18K
R2820 6.8K
R2809 220
Q2804
R2816 1.0K
C2811 47p
C2807 1000p
R2812 1.5K
R2810 560
R2813 5.6K
R2821 220
Q2803
R2815 22K
C2812 1000p
0.8Vp-p
4.9Vp-p fH
H sync signal 4.9Vp-p fH
AFT OUTPUT VOLTAGE DC 2.4±0.5V
A 3/9
H_SYNC2
AFT2
A 1/9
NC
TV_MUTE2
TV2-AU
TV2-V
(C)
(TV2)
VIDEO Signal 1 Vp-p Bias 4.8-6.4 V
1 Vp-p Bias 4.3-6.3 V

1.RESISTERS indicated in 1/2W,1/4W,1/10W,1WFL,2WFL 5%
tolerance unless otherwise noted K;kΩ , M;MΩ
(F)+1% , (G)+2% , (K)+10% , (M)+20% tolerance
2.CAPACITORS indicated in capasity (uF)/(V) unless otherwise noted pF
indicated without voltage is 50V except electrolytic capacitor

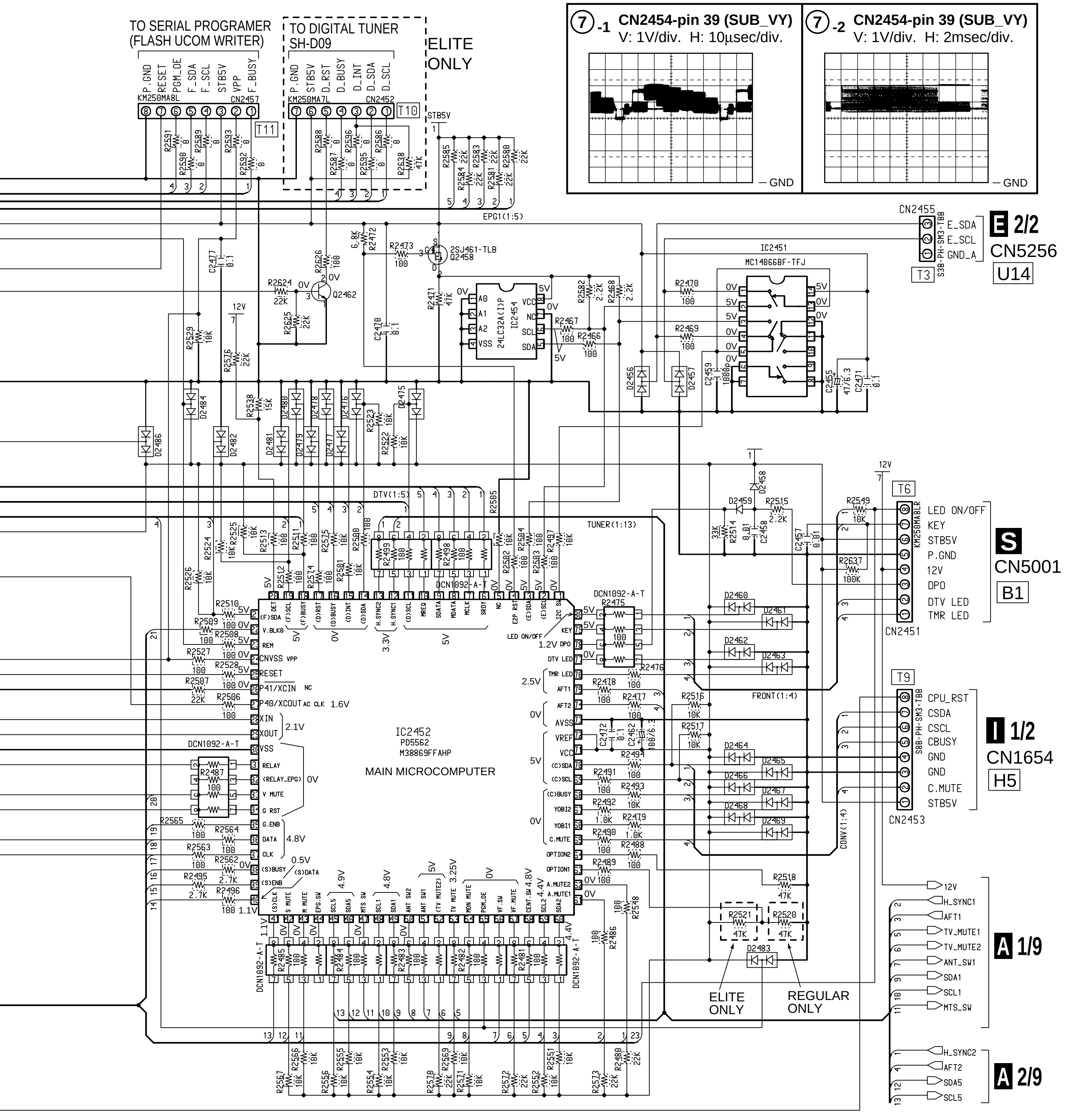

2SA1162(YGR)-TLB
2SC2712(YGR)-TLB
1SS226-TRB
1
2
3

3.5 SIGNAL ASSY (3/9)


A 3/9
SIGNAL ASSY
(AWV1800 :ELITE)
(AWV1805 :REGULAR)
• MAIN UCOM BLOCK
P CN201 E1
B 2/2 CN6204 A4
A 8/9
A 7/9
A 4/9
A 5/9
A 6/9
A 9/9
E 1/2
CN5603
U10
S_CLK
S_DATA
S_ENB
S_BUSY
CLK
DATA
G.ENB
V.MUTE
G.RST
5V
9V
VY
S_C
M.MUTE
SUB_VY
SUB_C
S.MUTE
SCL4
SDA4
1Y
1R_Y
1B_Y
2Y
2R_Y
2B_Y
DTV_Y
DTV_PB
DTV_PR
RGB_SEL
STB5V
ATX1035-A-T
L2451
L2452
L2457
ATF-163-
C2468
C2467
C2479
C2478
CEAT222M16-F
GND
5V
9V
12V
P.GND
AC.CLK
RELAY
S12B-PH-SM3-TBB
CN2458
T4
REM OUT
ADX2499-A
T12
J2451
R2594
FLASH(1:4)
5.1V
8.8V
8.9V
12.6V
V MUTE
M MUTE
TV MUTE
MON MUTE
D2454
D2455
D2490
1SS184-TLB
R2536
2.2K
R2543
R2542
R2550
R2540
R2539
R2541
Q2460
1.5V
0V
4.7K
15K
Q2455
Q2454
Q2456
R2456
220K
R2451
R2457
R2463
R2458
R2465
D2453
C2454
100/6.3
C2469
C2451
4.7/35
0.7V
0.1V
1.8K
R2534
IC2453
PST9146N-TLB
VCC
VOUT
NC
SUB
GND
R2533
1.0K
C2464
1000p
C2463
0.01
RD6.8MB-TLB
D2487
R2560
R2561
R2578
A.MUTE1
2SC4213(AB)-TLB
Q2451
Q2453
Q2452
R2461
D2452
R2460
R2453
R2462
C2452
R2452
D2451
R2454
C2460
C2461
R2459
C2474
C2473
R2455
D2488
R2537
C2465
C2480
X2451
ASS1015-
CONE(1:16)
CN2454
AKM1126-
T8
R2608
R2609
R2610
R2611
R2612
R2613
R2614
R2615
R2616
R2617
R2618
R2619
R2620
R2621
R2623
R2601
R2602
R2603
R2604
R2606
R2607
R2597
R2598
R2599
R2600
Y
Pb
Pr
2B_Y
2R_Y
1B_Y
1R_Y
SUB_C
SUB_VY
C
V_Y
RGB.SEL
TV_MUTE
V.BLK0
MON_MUTE
V_OX2
V_OX1
SDA4
V_F_SW
CENT_SW
SDA2
SCL4
V_F_MUTE
SCL2
A_MUTE2
A.MUTE
STB5V
C2453
47/16
R2464
3.3K
D2489
R2559
Q2457
R2531
220
R2532
Q2459
R2535
R2530
R2568
R2605
R2622
22K
R2628
R2627
Q2463
C2456
D2485
R2629
R2630
Q2464
R2631
C2476
22/16
R2632
R2633
Q2461
0.3V
1.3V
ETC(1:23)
7
6

6-1 CN2454-pin 36 (V_Y)
V: 1V/div. H: 10µsec/div.

6-2 CN2454-pin 36 (V_Y)
V: 1V/div. H: 2msec/div.


⑦-1 CN2454-pin 39 (SUB_VY)
V: 1V/div. H: 10µsec/div.
GND
⑦-2 CN2454-pin 39 (SUB_VY)
V: 1V/div. H: 2msec/div.
GND
TO SERIAL PROGRAMER (FLASH UCOM WRITER)
P.GND
RESET
PGM_OE
F_SDA
F_SCL
STB5V
VPP
F_BUSY
KM250MA8L
CN2457
T11
TO DIGITAL TUNER SH-D09
P.GND
STB5V
D_RST
D_BUSY
D_INT
D_SDA
D_SCL
KM250MA7L
CN2452
T10
ELITE ONLY
STB5V
EPG1(1:5)
2SJ461-TLB Q2458
Q2462
IC2454
24LC32A(I)P
IC2451
MC14066BF-TFJ
CN2455
E_SDA
E_SCL
GND_A
S3B-PH-SM3-TBB
T3
E 2/2
CN5256
U14
DTV(1:5)
TUNER(1:13)
IC2452
PD5562
M38869FFAHP
MAIN MICROCOMPUTER
DCN1092-A-T
FRONT(1:4)
CONV(1:4)
T6
KM250MA8LR
LED ON/OFF
KEY
STB5V
P.GND
12V
DPO
DTV LED
TMR LED
CN2451
S
CN5001
B1
T9
S8B-PH-SM3-TBB
CPU_RST
CSDA
CSCL
CBUSY
GND
GND
C.MUTE
STB5V
CN2453
I 1/2
CN1654
H5
12V
H_SYNC1
AFT1
TV_MUTE1
TV_MUTE2
ANT_SW1
SDA1
SCL1
MTS_SW
A 1/9
H_SYNC2
AFT2
SDA5
SCL5
A 2/9
ELITE ONLY
REGULAR ONLY
A
B
C
D

Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k : kΩ
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless otherwise noted p pF
Indication without voltage is 50V except electrolytic capacitor.

2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS352-TRB
1SS226-TRB

SUB SUFFIX

1	2	3	4	5
R2691	R2692	R2693	R2694	R2695
6	7	8	9	0
R2696	R2697	R2698	R2699	R2700

R2688 ELITE
R2689 REGULAR

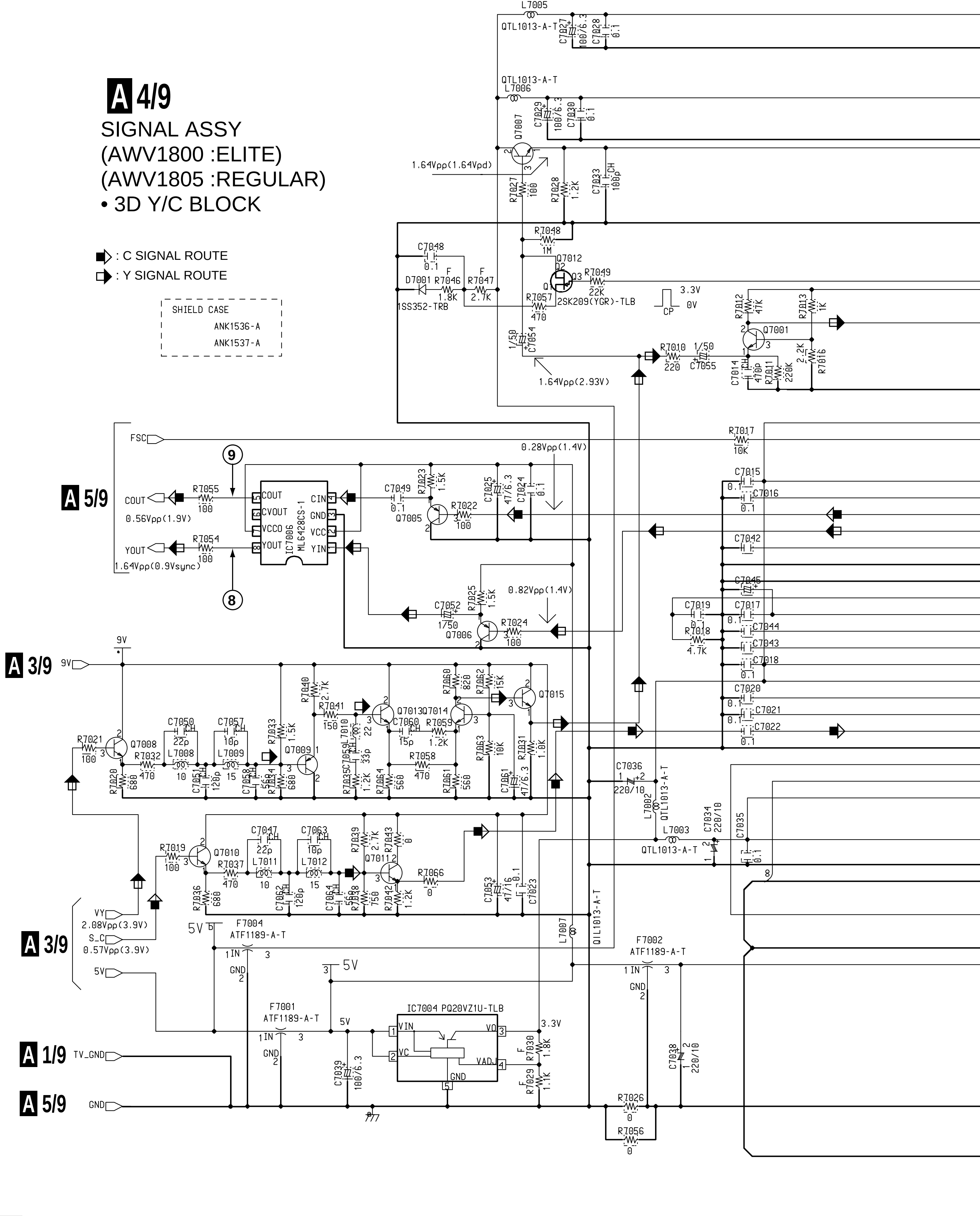
: C SIGNAL ROUTE
: Y SIGNAL ROUTE

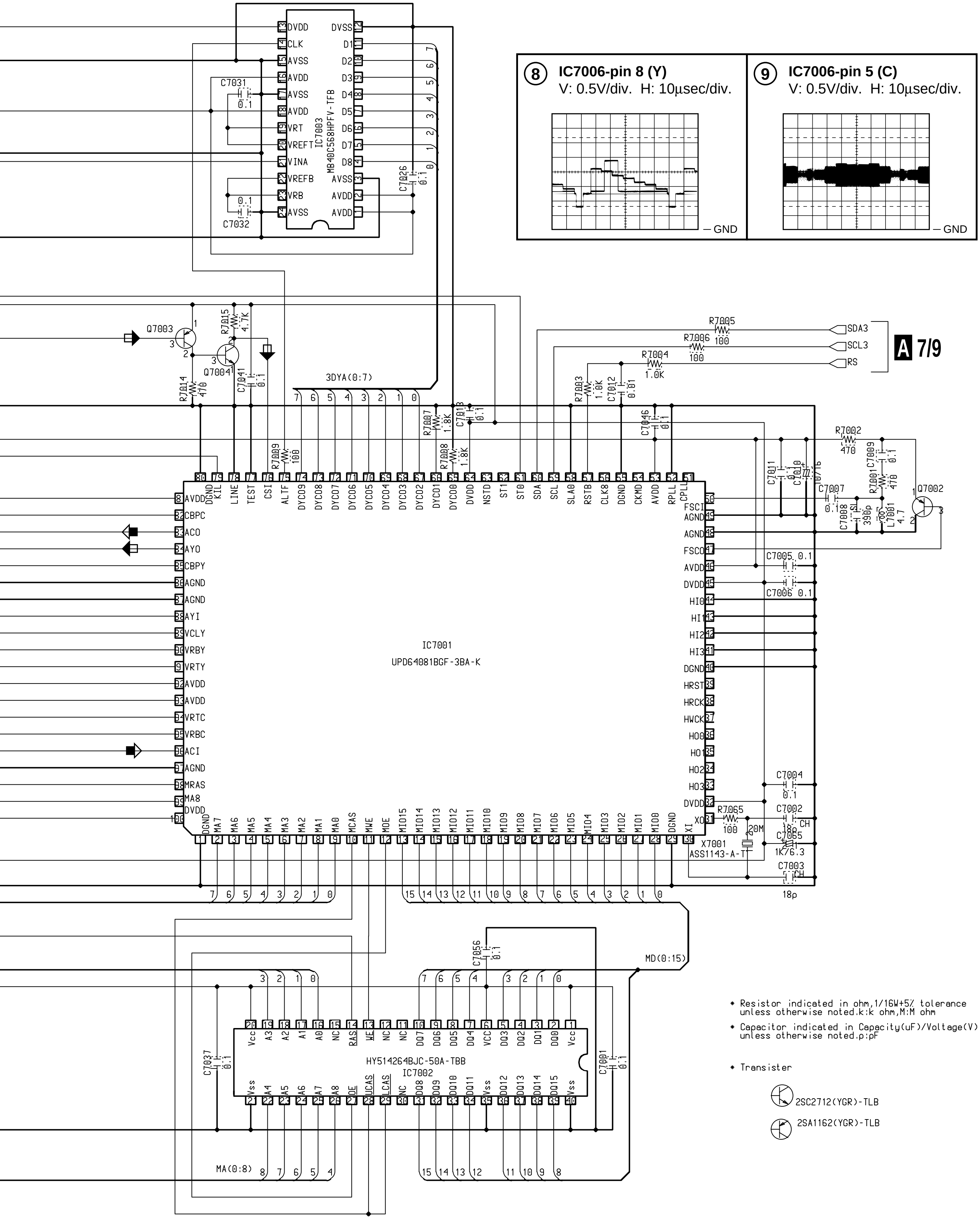
3.6 SIGNAL ASSY (4/9)

A 4/9

SIGNAL ASSY
(AWV1800 :ELITE)
(AWV1805 :REGULAR)
• 3D Y/C BLOCK

▶ : C SIGNAL ROUTE
▷ : Y SIGNAL ROUTE

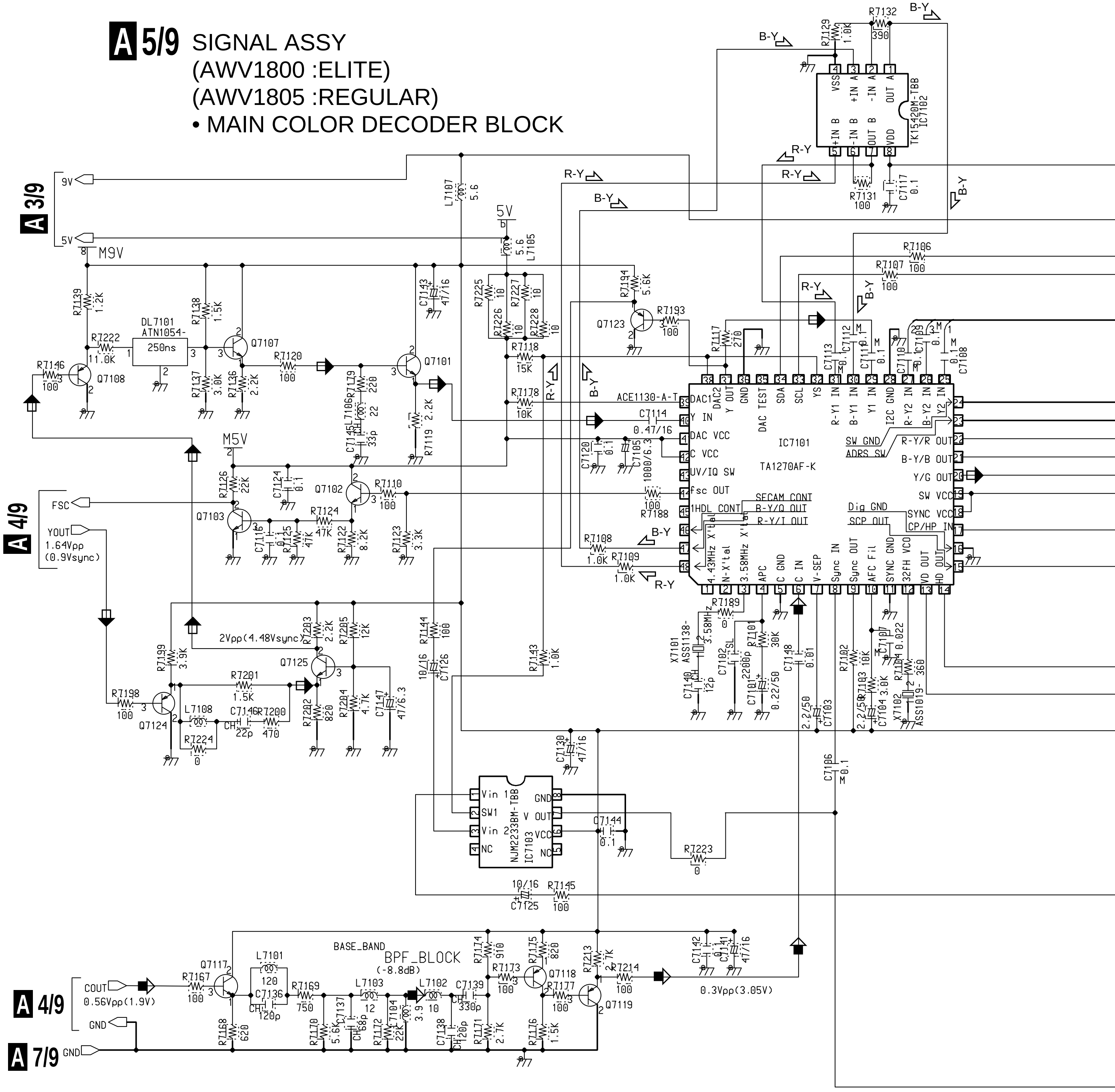

SHIELD CASE
ANK1536-A
ANK1537-A
L7005
QTL1013-A-T
C7027 100/6.3
C7028 0.1
L7006
QTL1013-A-T
C7029 100/6.3
C7030 0.1
Q7007
1.64Vpp(1.64Vpd)
R7027 100
R7028 1.2K
C7033 CH 100p
R7048 1M
C7048 0.1
D7001 1SS352-TRB
R7046 F 1.8K
R7047 F 2.7K
Q7012 2SK209(YGR)-TLB
R7049 22K
R7057 470
3.3V
0V
CP
C7054 1/50
1.64Vpp(2.93V)
R7010 220
C7055 1/50
R7012 47K
R7013 1K
Q7001
R7011 220K
R7016 2.2K
C7014 CH 470p
R7017 10K
FSC
9
8
A 5/9
COUT
0.56Vpp(1.9V)
R7055 100
YOUT
R7054 100
1.64Vpp(0.9Vsync)
IC7006 ML6428CS-1
COUT CVOUT VCCO YOUT CIN GND VCC YIN
C7049 0.1
R7023 1.5K
Q7005
R7022 100
C7025 47/6.3
C7024 0.1
0.28Vpp(1.4V)
C7015 0.1
C7016 0.1
C7042
C7045
C7019 0.1
R7018 4.7K
C7017 0.1
C7044
C7043
C7018 0.1
C7020 0.1
C7021
C7022 0.1
C7052 1/50
R7025 1.5K
0.82Vpp(1.4V)
Q7006
R7024 100
A 3/9
9V
R7021 100
Q7008
R7020 680
R7032 470
C7050 CH 22p
L7008 10
C7051 CH 120p
C7057 CH 10p
L7009 15
C7058 CH 560
R7033 1.5K
R7034 680
Q7009
R7040 2.7K
R7041 150
L7010 33p
C7059 22
Q7013 Q7014
C7060 CH 15p
R7059 1.2K
R7035 1.2K
R7064 560
R7058 470
R7060 820
R7062 15K
R7061 560
R7063 10K
R7031 1.0K
Q7015
C7061 47/6.3
C7036 220/10
L7002 QTL1013-A-T
L7003 QTL1013-A-T
C7034 220/10
C7035 0.1
R7019 100
Q7010
R7036 680
R7037 470
C7047 CH 22p
L7011 10
C7062 CH 120p
C7063 CH 10p
L7012 15
C7064 CH 56p
R7038 750
R7039 2.7K
R7043 0
Q7011
R7042 1.2K
R7066 0
C7053 47/16
C7023 0.1
VY
2.08Vpp(3.9V)
S_C
0.57Vpp(3.9V)
5V
F7004 ATF1189-A-T
IN GND
L7007 QIL1013-A-T
F7002 ATF1189-A-T
F7001 ATF1189-A-T
IC7004 PQ20VZ1U-TLB
VIN VC VO VADJ GND
3.3V
R7030 F 1.8K
R7029 F 1.1K
C7039 100/6.3
C7038 220/10
A 1/9
TV_GND
A 5/9
GND
R7026 0
R7056 0


⑧ IC7006-pin 8 (Y)
V: 0.5V/div. H: 10µsec/div.
GND
⑨ IC7006-pin 5 (C)
V: 0.5V/div. H: 10µsec/div.
GND
IC7003
MB40C568HPFV-TFB
DVDD
CLK
AVSS
AVDD
VRT
VREFT
VINA
VREFB
VRB
DVSS
D1
D2
D3
D4
D5
D6
D7
D8
C7031 0.1
C7032 0.1
C7026 0.1
Q7003
Q7004
R7015 4.7K
R7014 470
C7041 0.1
3DYA(0:7)
R7009 100
R7007 1.8K
R7008 1.8K
C7013 0.1
R7003 1.0K
C7012 0.01
C7046 0.1
R7005 100
R7006 100
R7004 1.0K
SDA3
SCL3
RS
A 7/9
R7002 470
C7009 0.1
R7001 470
C7011 0.1
C7010 0.1
C7016 10/16
C7007
C7008 0.108
390p
L7001 4.7
Q7002
IC7001
UPD64081BGF-3BA-K
AVDD
CBPC
ACO
AYO
CBPY
AGND
AYI
VCLY
VRBY
VRTY
VRTC
VRBC
ACI
MRAS
MA8
DVDD
DGND
KIL
LINE
TEST
CSI
ALTF
DYCO9
DYCO8
DYCO7
DYCO6
DYCO5
DYCO4
DYCO3
DYCO2
DYCO1
DYCO0
NSTD
ST1
ST0
SDA
SCL
SLA0
RSTB
CLK8
CKMD
RPLL
CPLL
FSCI
FSCO
HI0
HI1
HI2
HI3
HRST
HRCK
HWCK
HO0
HO1
HO2
HO3
XO
XI
MA7
MA6
MA5
MA4
MA3
MA2
MA1
MA0
MCAS
MWE
MOE
MIO15
MIO14
MIO13
MIO12
MIO11
MIO10
MIO9
MIO8
MIO7
MIO6
MIO5
MIO4
MIO3
MIO2
MIO1
MIO0
C7005 0.1
C7006 0.1
C7004 0.1
C7002 18p CH
C7065 1K/6.3
C7003 18p CH
R7065 100
20M
X7001
ASS1143-A-T
MD(0:15)
C7056 0.1
HY514264BJC-50A-TBB
IC7002
Vcc
A3
A2
A1
A0
NC
RAS
WE
DQ7
DQ6
DQ5
DQ4
VCC
DQ3
DQ2
DQ1
DQ0
Vss
A4
A5
A6
A7
A8
OE
UCAS
LCAS
DQ8
DQ9
DQ10
DQ11
DQ12
DQ13
DQ14
DQ15
C7037 0.1
C7001 0.1
MA(0:8)
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB

- Resistor indicated in ohm,1/16W+5/ tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF
- Transister

3.7 SIGNAL ASSY (5/9)

A 5/9 SIGNAL ASSY
(AWV1800 :ELITE)
(AWV1805 :REGULAR)
• MAIN COLOR DECODER BLOCK


A 3/9
9V
5V
M9V
A 4/9
FSC
YOUT
1.64Vpp
(0.9Vsync)
A 4/9
COUT
0.56Vpp(1.9V)
GND
A 7/9
GND
IC7101
TA1270AF-K
ACE1130-A-T
IC7102
TK15420M-TBB
IC7103
NJM2233BM-TBB
DL7101
ATN1054-
250ns
Q7101
Q7102
Q7103
Q7107
Q7108
Q7117
Q7118
Q7119
Q7123
Q7124
Q7125
X7101
ASS1138-
3.58MHz
X7102
ASS1019-
2Vpp(4.48Vsync)
BASE_BAND
BPF_BLOCK
(-8.8dB)
0.3Vpp(3.05V)
M5V
R-Y
B-Y
DAC1
DAC2
Y OUT
GND
DAC TEST
SDA
SCL
YS
R-Y1 IN
B-Y1 IN
Y1 IN
I2C GND
R-Y2 IN
B-Y2 IN
Y2 IN
Y IN
DAC VCC
C VCC
UV/IQ SW
fsc OUT
1HDL CONT
SECAM CONT
B-Y/Q OUT
R-Y/I OUT
SW GND
ADRS SW
R-Y/R OUT
B-Y/B OUT
Y/G OUT
SW VCC
SYNC VCC
CP/HP IN
Dig GND
SCP OUT
4.43MHz X'tal
N-X'tal
3.58MHz X'tal
APC
C GND
C IN
V-SEP
Sync IN
Sync OUT
AFC Fil
SYNC GND
32FH VCO
VD OUT
HD OUT
VSS
+IN A
-IN A
OUT A
+IN B
-IN B
OUT B
VDD
Vin 1
SW1
Vin 2
NC
GND
V OUT
VCC

- Resistor indicated in ohm,1/16W+5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF

- Transister

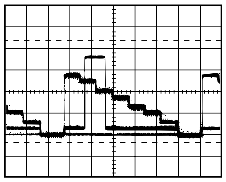
2SC2712(YGR)-TLB

2SA1162(YGR)-TLB

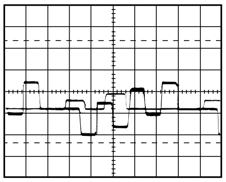
1/16W

➡ : C SIGNAL ROUTE
⇨ : Y SIGNAL ROUTE
R-Y△ : R-Y SIGNAL ROUTE
B-Y△ : B-Y SIGNAL ROUTE

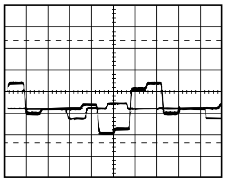
⑩ Q7115-Emitter (MY) (AC)
V: 0.2V/div. H: 10µsec/div.

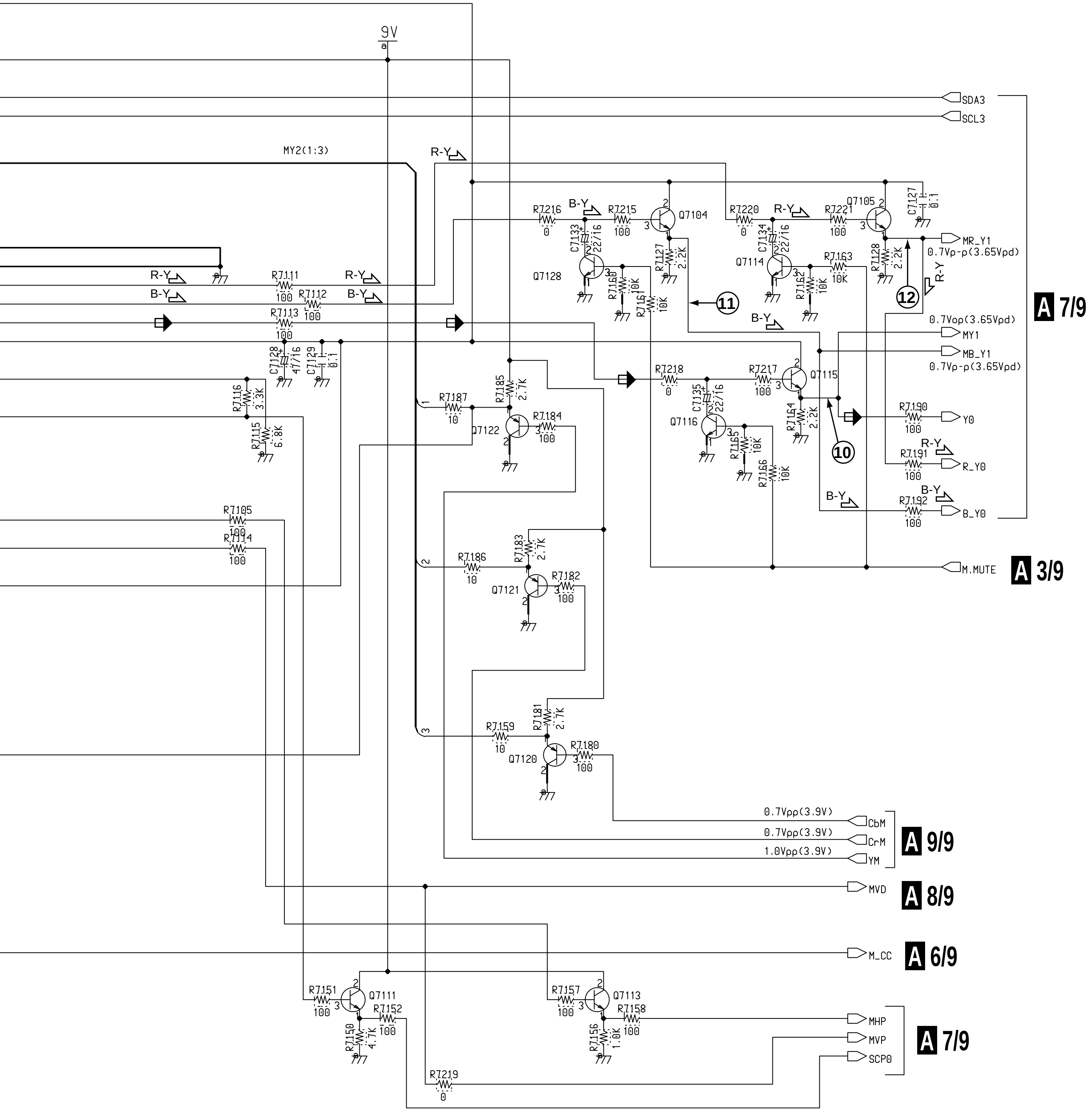


⑪ Q7104-Emitter (MB-Y) (AC)
V: 0.2V/div. H: 10µsec/div.



⑫ Q7105-Emitter (MR-Y) (AC)
V: 0.2V/div. H: 10µsec/div.

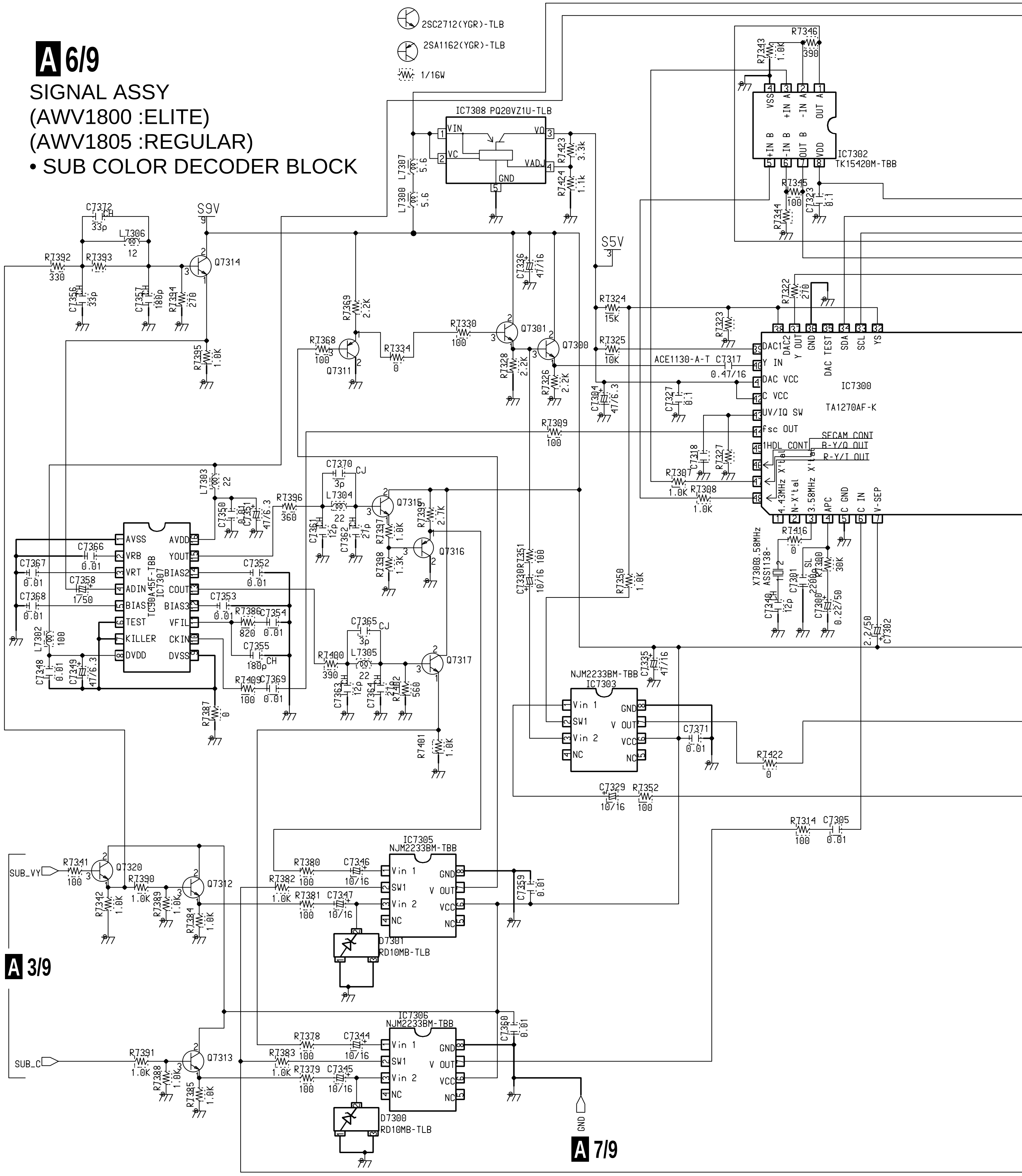


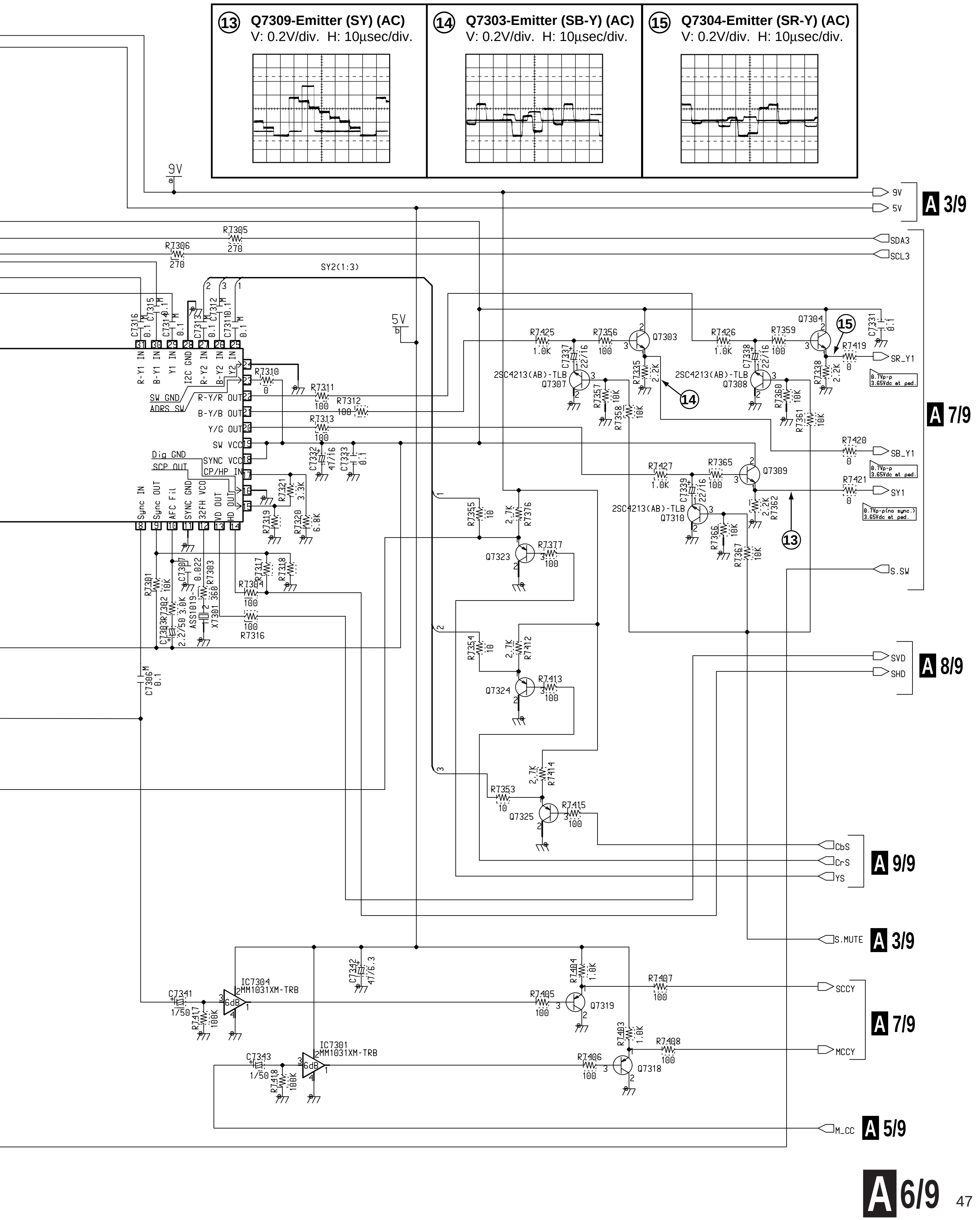

9V
SDA3
SCL3
MY2(1:3)
R-Y
B-Y
R7216 0
R7215 100
Q7104
R7220 0
R7221 100
Q7105
C7127 0.1
C7133 22/16
Q7128
R7160 10K
R7161 10K
R7127 2.2K
C7134 22/16
Q7114
R7163 10K
R7162 10K
R7128 2.2K
MR_Y1
0.7Vp-p(3.65Vpd)
0.7Vop(3.65Vpd)
MY1
MB_Y1
0.7Vp-p(3.65Vpd)
A 7/9
R7111 100
R7112 100
R7113 100
C7128 47/16
C7129 0.1
R7116 3.3K
R7115 6.8K
R7187 10
R7185 2.7K
Q7122
R7184 100
R7218 0
R7217 100
Q7115
C7135 22/16
Q7116
R7165 10K
R7166 10K
R7164 2.2K
R7190 100
Y0
R7191 100
R_Y0
R7192 100
B_Y0
M.MUTE
A 3/9
R7105 100
R7114 100
R7186 10
R7183 2.7K
Q7121
R7182 100
R7159 10
R7181 2.7K
Q7120
R7180 100
0.7Vpp(3.9V) CbM
0.7Vpp(3.9V) CrM
1.0Vpp(3.9V) YM
A 9/9
MVD
A 8/9
M_CC
A 6/9
R7151 100
Q7111
R7152 100
R7150 4.7K
R7157 100
Q7113
R7158 100
R7156 1.0K
MHP
MVP
SCP0
A 7/9
R7219 0
⑩
⑪
⑫

3.8 SIGNAL ASSY (6/9)

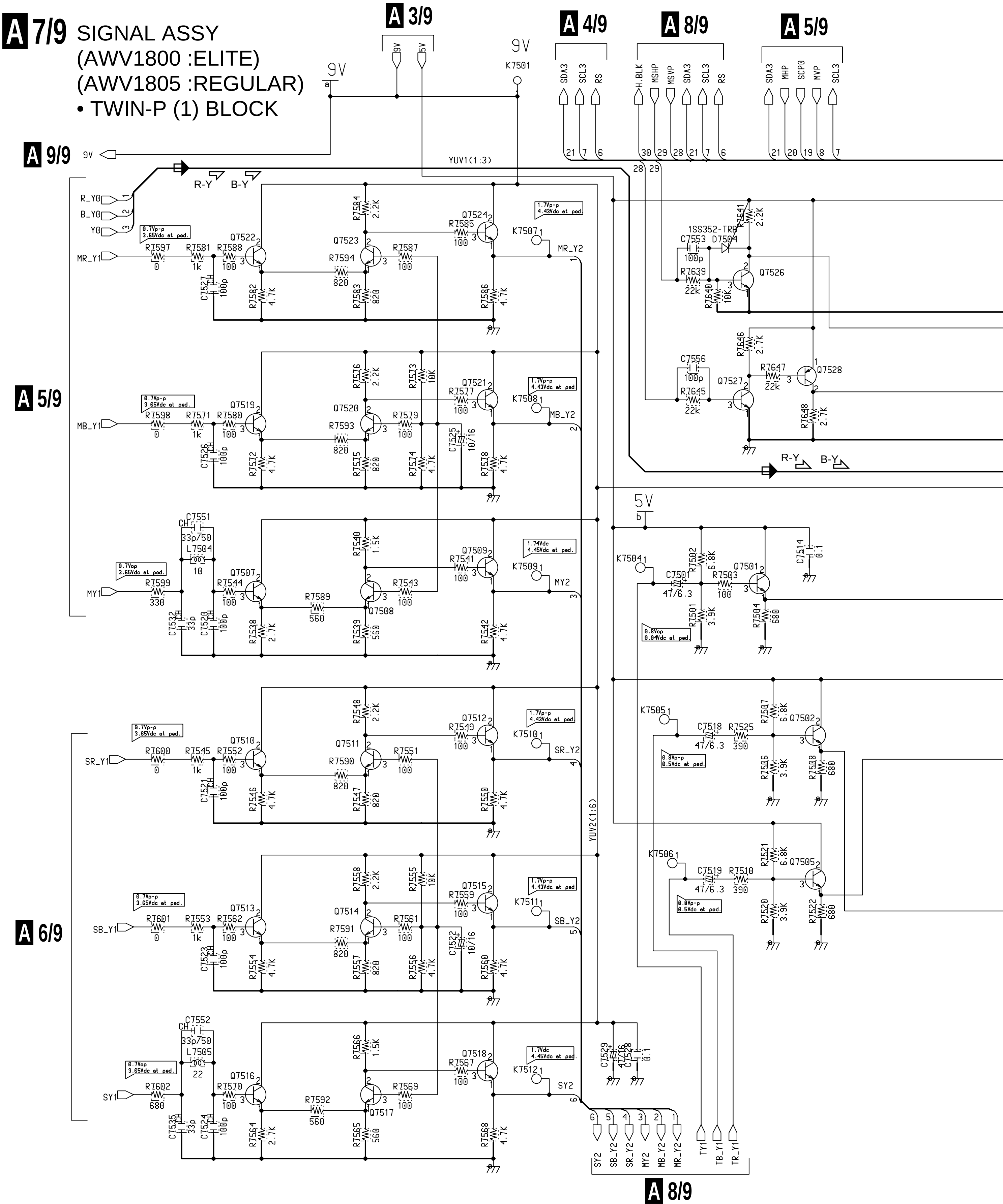
A 6/9

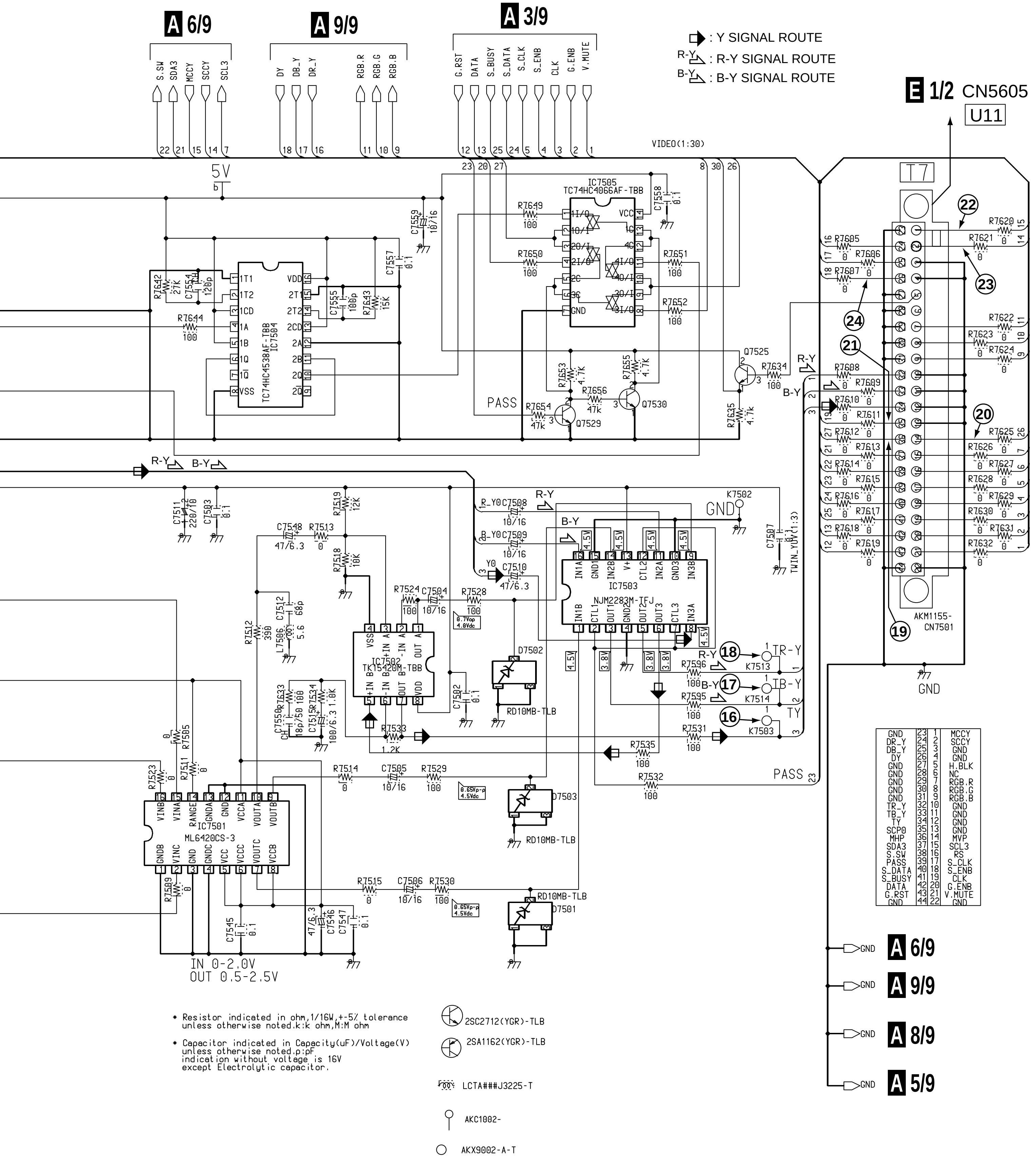
SIGNAL ASSY
(AWV1800 :ELITE)
(AWV1805 :REGULAR)
• SUB COLOR DECODER BLOCK


A
B
C
D
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1/16W
IC7308 PQ20VZ1U-TLB
VIN
VC
VO
VADJ
GND
L7307 5.6
L7300 5.6
R7423 3.3k
R7424 1.1k
S9V
S5V
C7372 CH 33p
L7306 12
R7392 330
R7393
Q7314
C7356 CH 33p
C7357 CH 180p
R7394 270
R7395 1.0K
C7336 47/16
R7369 2.2K
R7368 100
Q7311
R7334 0
R7330 100
Q7301
Q7300
R7328 2.2K
R7326 2.2K
R7324 15K
R7325 10K
C7304 47/6.3
R7309 100
R7346 390
R7343 1.0K
IC7302 TK15420M-TBB
VSS
+IN A
-IN A
OUT A
+IN B
-IN B
OUT B
VDD
R7345 100
R7344
C7323 0.1
R7322 270
R7323
IC7300 TA1270AF-K
DAC1
DAC2
Y OUT
GND
DAC TEST
SDA
SCL
YS
Y IN
DAC VCC
C VCC
UV/IQ SW
fsc OUT
1HDL CONT
SECAM CONT
B-Y/Q OUT
R-Y/I OUT
4.43MHz X'tal
N-X'tal
3.58MHz X'tal
APC
C GND
C IN
V-SEP
ACE1130-A-T C7317 0.47/16
C7327 0.1
C7318
R7327
R7307 1.0K
R7308 1.0K
R7416
X7300 3.58MHz ASS1138-
C7340 12p
C7301 SL 2000p
R7300 30K
C7300 0.22/50
C7302 2.2/50
L7303 22
C7350 0.01
C7351 47/6.3
R7396 360
C7370 3p CJ
L7304 22
Q7315
C7361 CH 12p
C7362 CH 27p
R7397 1.0K
R7399 2.7K
R7398 1.3K
Q7316
IC7307 TC90A45F-TBB
AVSS
VRB
VRT
ADIN
BIAS
TEST
KILLER
DVDD
AVDD
YOUT
BIAS2
COUT
BIAS3
VFIL
CKIN
DVSS
C7366 0.01
C7367 0.01
C7358 1/50
C7368 0.01
C7352 0.01
C7353 0.01
R7386 820
C7354 0.01
C7355 CH 180p
R7409 100
C7369 0.01
L7302 100
C7348 0.01
C7349 47/6.3
R7387 0
C7365 3p CJ
L7305 22
R7400 390
Q7317
C7363 CH 12p
C7364 CH 27p
R7402 560
R7401 1.0K
C7330 10/16
R7351 100
R7350 1.0K
C7335 47/16
IC7303 NJM2233BM-TBB
Vin 1
SW1
Vin 2
NC
GND
V OUT
VCC
C7371 0.01
R7422 0
C7329 10/16
R7352 100
R7314 100
C7305 0.01
SUB_VY
R7341 100
Q7320
R7390 1.0K
Q7312
R7342 1.0K
R7389 1.0K
R7384 1.0K
IC7305 NJM2233BM-TBB
R7380 100
C7346 10/16
R7382 1.0K
R7381 100
C7347 10/16
C7359 0.01
D7301 RD10MB-TLB
A 3/9
SUB_C
R7391 1.0K
Q7313
R7388 1.0K
R7385 1.0K
IC7306 NJM2233BM-TBB
R7378 100
C7344 10/16
R7383 1.0K
R7379 100
C7345 10/16
C7360 0.01
D7300 RD10MB-TLB
GND
A 7/9


⑬ Q7309-Emitter (SY) (AC)
V: 0.2V/div. H: 10µsec/div.
⑭ Q7303-Emitter (SB-Y) (AC)
V: 0.2V/div. H: 10µsec/div.
⑮ Q7304-Emitter (SR-Y) (AC)
V: 0.2V/div. H: 10µsec/div.
9V
5V
SDA3
SCL3
A 3/9
A 7/9
A 8/9
A 9/9
A 5/9
R7305 270
R7306 270
SY2(1:3)
C7316 0.1 M
C7315 0.1 M
C7314 0.1 M
C7313 0.1 M
C7312 0.1 M
C7311 0.1 M
R-Y1 IN
B-Y1 IN
Y1 IN
I2C GND
R-Y2 IN
B-Y2 IN
Y2 IN
SW GND
ADRS SW
R-Y/R OUT
B-Y/B OUT
Y/G OUT
SW VCC
Dig GND
SYNC VCC
SCP OUT
CP/HP IN
Sync IN
Sync OUT
AFC Fil
SYNC GND
32FH VCO
VD OUT
HD OUT
R7310 0
R7311 100
R7312 100
R7313 100
C7332 47/16
C7333 0.1
R7321 3.3K
R7319
R7320 6.8K
R7301
R7302 10K
C7303 2.2/50
R7303 3.0K
C7307 0.022
ASS1019-
X7301 360
R7304 100
R7316 100
R7317
R7318
C7306 0.1 M
R7425 1.0K
R7356 100
Q7303
C7337 22/16
2SC4213(AB)-TLB
Q7307
R7335 2.2K
R7357 10K
R7358 10K
R7426 1.0K
R7359 100
Q7304
C7331 0.1
R7419 0
SR_Y1
C7338 22/16
2SC4213(AB)-TLB
Q7308
R7338 2.2K
R7360 10K
R7361 10K
0.7Vp-p
3.65Vdc at ped.
R7420 0
SB_Y1
R7427 1.0K
R7365 100
Q7309
R7421 0
SY1
C7339 22/16
2SC4213(AB)-TLB
Q7310
R7362 2.2K
0.7Vp-p(no sync.)
3.65Vdc at ped.
R7366 10K
R7367 10K
R7355 10
R7376 2.7K
Q7323
R7377 100
S.SW
R7354 10
R7412 2.7K
Q7324
R7413 100
SVD
SHD
R7414 2.7K
R7353 10
Q7325
R7415 100
CbS
CrS
YS
S.MUTE
C7342 47/6.3
R7404 1.0K
R7407 100
SCCY
IC7304
MM1031XM-TRB
6dB
C7341 1/50
R7417 100K
R7405 100
Q7319
R7403 1.0K
R7408 100
MCCY
IC7301
MM1031XM-TRB
C7343 1/50
R7418 100K
R7406 100
Q7318
M_CC
A B C D

3.9 SIGNAL ASSY (7/9)


A 7/9
SIGNAL ASSY
(AWV1800 :ELITE)
(AWV1805 :REGULAR)
• TWIN-P (1) BLOCK
A 3/9
9V
5V
9V
K7501
A 4/9
SDA3
SCL3
RS
A 8/9
H.BLK
MSHP
MSVP
SDA3
SCL3
RS
A 5/9
SDA3
MHP
SCP0
MVP
SCL3
A 9/9
YUV1(1:3)
R-Y
B-Y
R_Y0
B_Y0
Y0
MR_Y1
MB_Y1
MY1
SR_Y1
SB_Y1
SY1
A 5/9
A 6/9
0.7Vp-p 3.65Vdc at ped.
1.7Vp-p 4.43Vdc at ped.
1.74Vdc 4.45Vdc at ped.
1.7Vdc 4.45Vdc at ped.
0.8Vop 0.84Vdc at ped.
0.8Vp-p 0.5Vdc at ped.
Q7522
Q7523
Q7524
Q7519
Q7520
Q7521
Q7507
Q7508
Q7509
Q7510
Q7511
Q7512
Q7513
Q7514
Q7515
Q7516
Q7517
Q7518
Q7526
Q7527
Q7528
Q7501
Q7502
Q7505
K7507
K7508
K7509
K7510
K7511
K7512
K7504
K7505
K7506
MR_Y2
MB_Y2
MY2
SR_Y2
SB_Y2
SY2
1SS352-TRB
D7504
L7504
L7505
5V
YUV2(1:6)
SY2
SB_Y2
SR_Y2
MY2
MB_Y2
MR_Y2
TY1
TB_Y1
TR_Y1
A 8/9


A 6/9
S.SW SDA3 MCCY SCCY SCL3
A 9/9
DY DB_Y DR_Y RGB.R RGB.G RGB.B
A 3/9
G.RST DATA S_BUSY S_DATA S_CLK S_ENB CLK G.ENB V.MUTE
: Y SIGNAL ROUTE
R-Y : R-Y SIGNAL ROUTE
B-Y : B-Y SIGNAL ROUTE
E 1/2 CN5605
U11
VIDEO(1:30)
T7
5V
IC7505
TC74HC4066AF-TBB
IC7504
TC74HC4538AF-TBB
1T1 1T2 1CD 1A 1B 1Q 1Q VSS VDD 2T1 2T2 2CD 2A 2B 2Q 2Q
1I/O 1O/I 2O/I 2I/O 2C 3C GND VCC 1C 4C 4I/O 4O/I 3O/I 3I/O
R7642 27k
C7554 120p
R7644 100
C7555 100p
R7643 15K
C7557 0.1
C7559 10/16
C7558 0.1
R7649 100
R7650 100
R7651 100
R7652 100
R7653 4.7K
R7655 4.7K
R7656 47k
R7654 47k
PASS
Q7529
Q7530
Q7525
R7634 100
R7635 4.7k
R-Y
B-Y
R7605 R7606 R7607 R7608 R7609 R7610 R7611 R7612 R7613 R7614 R7615 R7616 R7617 R7618 R7619 0
R7620 R7621 R7622 R7623 R7624 R7625 R7626 R7627 R7628 R7629 R7630 R7631 R7632 0
㉒ ㉓ ㉔ ㉑ ⑳ ⑲ ⑱ ⑰ ⑯
AKM1155-
CN7501
GND
C7511 220/10
C7503 0.1
R7519 12K
R7518 10K
C7548 47/6.3
R7513 0
R_YO C7508 10/16
B_YO C7509 10/16
YO C7510 47/6.3
K7502
GND
C7507 0.1
TWIN_YO(1:3)
IC7503
NJM2283M-TFJ
IN1A GND1 IN2B V+ CTL2 IN2A GND3 IN3B IN1B CTL1 OUT1 GND2 OUT2 CTL3 OUT3 IN3A
4.5V 3.8V
R7524 100
C7504 10/16
R7528 100
0.7Vp 4.0Vdc
IC7502
TK15420M-TBB
VSS +IN A -IN A OUT A +IN B -IN B OUT B VDD
D7502
RD10MB-TLB
C7502 0.1
R7512 390
C7512 68p
L7506 5.6
R7533 100
R7534 1.0K
C7550 18p/50
C7515 100/6.3
R7533 1.2K
R7596 100
R7595 100
R7531 100
R7535 100
R7532 100
TR-Y K7513
TB-Y K7514
TY K7503
PASS
R7505 0
R7511 0
R7523 0
IC7501
ML6420CS-3
VINB VINA RANGE GNDA GND VCCA VOUTA VOUTB GNDB VINC GND GNDC VCC VCCC VOUTC VCCB
R7514 0
C7505 10/16
R7529 100
0.65Vp-p 4.5Vdc
D7503
RD10MB-TLB
R7509 0
R7515 0
C7506 10/16
R7530 100
D7501
RD10MB-TLB
C7545 0.1
C7546 47/6.3
C7547 0.1
IN 0-2.0V
OUT 0.5-2.5V
GND A 6/9
GND A 9/9
GND A 8/9
GND A 5/9
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
LCTA###J3225-T
AKC1002-
AKX9002-A-T

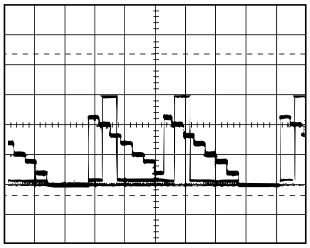
GND	23	1	MCCY
DR_Y	24	2	SCCY
DB_Y	25	3	GND
DY	26	4	GND
GND	27	5	H.BLK
GND	28	6	NC
GND	29	7	RGB.R
GND	30	8	RGB.G
GND	31	9	RGB.B
TR_Y	32	10	GND
TB_Y	33	11	GND
TY	34	12	GND
SCP0	35	13	GND
MHP	36	14	MVP
SDA3	37	15	SCL3
S.SW	38	16	RS
PASS	39	17	S_CLK
S_DATA	40	18	S_ENB
S_BUSY	41	19	CLK
DATA	42	20	G.ENB
G.RST	43	21	V.MUTE
GND	44	22	GND

- Resistor indicated in ohm,1/16W,+-5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 16V except Electrolytic capacitor.

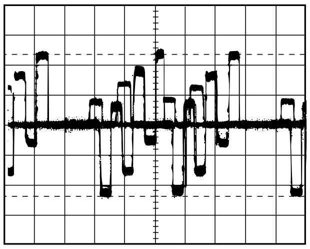
A 7/9 SIGNAL ASSY (7/9)

Input signal
Video signal : EIA full color-bar
Picture quality : Standard
Range :DC range (Unless otherwise noted)

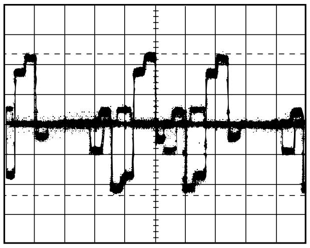
⑯ **K7503 (TY) (AC)**
V: 0.5V/div. H: 10µsec/div.



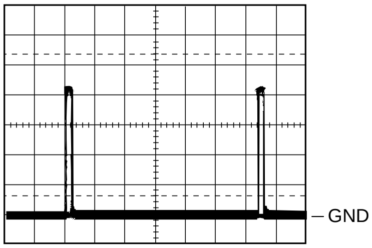
⑰ **K7514 (TB-Y) (AC)**
V: 0.1V/div. H: 10µsec/div.



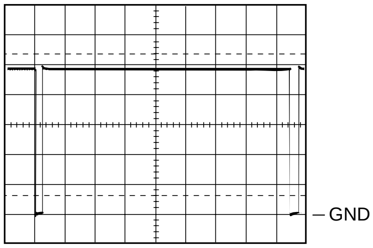
⑱ **K7513 (TR-Y) (AC)**
V: 0.1V/div. H: 10µsec/div.



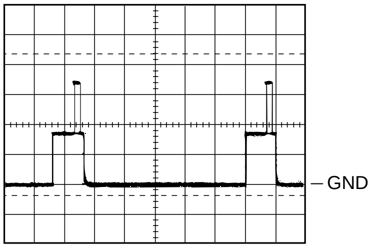
⑲ **CN7501-pin 36 (MHP)**
V: 1V/div. H: 10µsec/div.



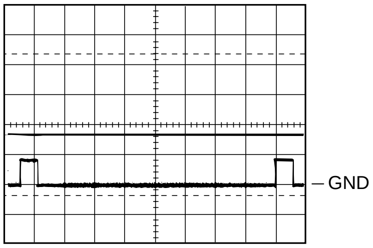
⑳ **CN7501-pin 14 (MVP)**
V: 1V/div. H: 2msec/div.



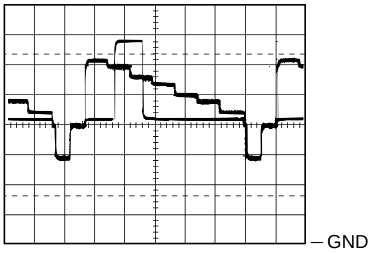
㉑-1 **CN7501-pin 35 (SCP0)**
V: 2V/div. H: 10µsec/div.



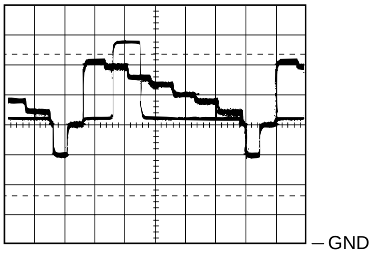
㉑-2 **CN7501-pin 35 (SCP0)**
V: 2V/div. H: 2msec/div.



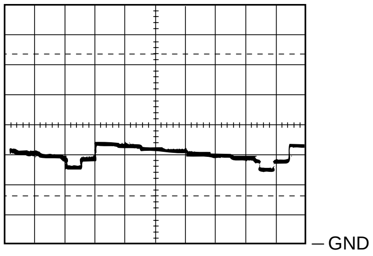
㉒ **CN7501-pin 1 (MCCY)**
V: 0.5V/div. H: 10µsec/div.



㉓ **CN7501-pin 2 (SCCY)**
V: 0.5V/div. H: 10µsec/div.



㉔ **CN7501-pin 26 (DYOUT)**
V: 1V/div. H: 10µsec/div.



A 7/9 SIGNAL ASSY (7/9)

IC7501 (ML6420CS-3)

Pin No.	Voltage (V)
1	0
2	1.16V at ped.
3	0
4	0
5	5
6	5
7	1.8V at ped.
8	5
9	1.7V at ped.
10	1.7V at ped.
11	5
12	0
13	0
14	5
15	1.04V at ped.
16	1.14V at ped

IC7502 (TK15420M)

Pin No.	Voltage (V)
1	3.8V at ped.
2	3.8V at ped.
3	3.8V at ped.
4	0
5	3.5V at ped.
6	3.5V at ped.
7	3.5V at ped.
8	9

IC7503 (NJM2283M

Pin No.	Voltage (V)
1	4.4
2	2.8 (sprit-screens) 0.1 (single-screen)
3	3.7
4	0
5	3.7
6	3.5
7	2.8 (sprit-screens) 0.1 (single-screen)
8	4.2
9	4.2
10	0
11	4.4
12	2.8 (sprit-screens) 0.1 (single-screen)
13	8.8
14	4.4
15	0
16	4.4

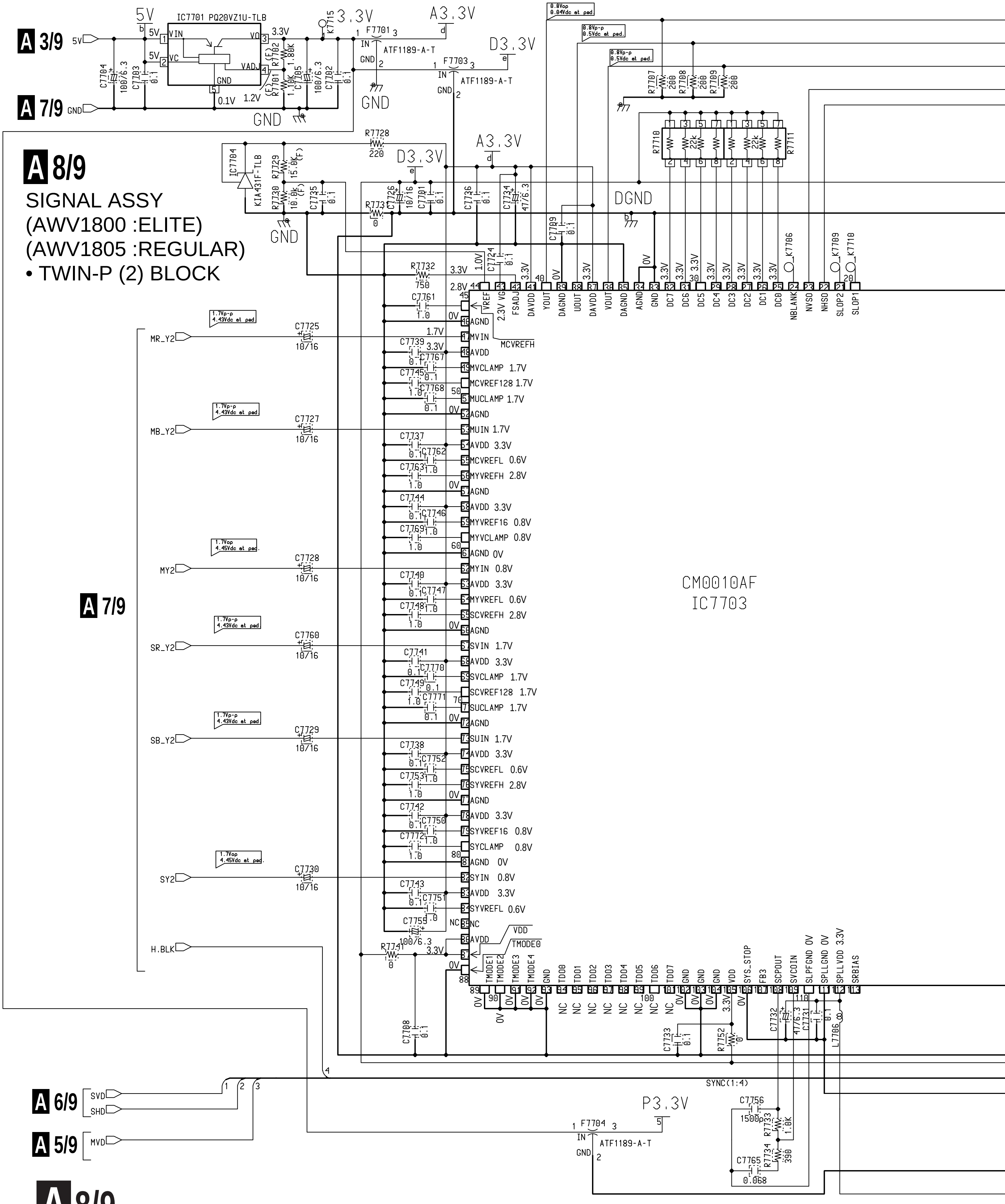
IC7504 (TC74HC4538AF)

Pin No.	Voltage (V)
1	0
2	5
3	5
4	0 – 5
5	5
6	0 – 5
7	0 – 5
8	0
9	0 – 5
10	0 – 5
11	0 – 5
12	0
13	5
14	5
15	0
16	5

IC7505 (TC74HC4066AF)

Pin No.	Voltage (V)
1	0 – 5
2	0 – 5
3	0 – 5
4	0 – 5
5	0 (sprit-screens) 4.6 (single-screen)
6	0 (sprit-screens) 4.6 (single-screen)
7	0
8	0 – 5
9	0 – 5
10	0 – 5
11	0 – 5
12	5 (sprit-screens) 0 (single-screen)
13	5 (sprit-screens) 0 (single-screen)
14	5

3.10 SIGNAL ASSY (8/9)


A 3/9
5V
A 7/9
GND
5V
IC7701 PQ20VZ1U-TLB
VIN
VO
VC
VADJ
GND
3.3V
0.1V
1.2V
C7704 100/6.3
C7703 0.1
R7702 1.80K (F)
R7701 1.10K (F)
C7705 100/6.3
C7702 0.1
K7715
3.3V
F7701
ATF1189-A-T
IN
GND
A3.3V
D3.3V
F7703
ATF1189-A-T
GND
0.8Vop 0.04Vdc at ped
0.8Vp-p 0.5Vdc at ped.
0.8Vp-p 0.5Vdc at ped.
R7707 200
R7708 200
R7709 200
R7710 22k
R7711 22k
IC7704 KIA431F-TLB
R7728 220
R7729 15.0K (F)
R7730 10.0K (F)
C7735 0.1
R7731 0
C7726 10/16
C7701 0.1
C7736 0.1
C7734 47/6.3
A3.3V
D3.3V
DGND
C7709 0.1
R7732 750
C7724 0.1
C7761 1.0
1.0V
3.3V
2.8V
VREF
2.3V VG
FSADJ
DAVDD
YOUT
DAGND
UOUT
DAVDD
VOUT
DAGND
AGND
GND
DC7
DC6
DC5
DC4
DC3
DC2
DC1
DC0
NBLANK
NVSO
NHSO
SLOP2
SLOP1
K7706
K7709
K7710
MCVREFH
1.7Vp-p 4.43Vdc at ped
MR_Y2
C7725 10/16
1.7Vp-p 4.43Vdc at ped
MB_Y2
C7727 10/16
1.7Vop 4.45Vdc at ped.
MY2
C7728 10/16
A 7/9
1.7Vp-p 4.43Vdc at ped
SR_Y2
C7760 10/16
1.7Vp-p 4.43Vdc at ped
SB_Y2
C7729 10/16
1.7Vop 4.45Vdc at ped.
SY2
C7730 10/16
H.BLK
AGND
MVIN 1.7V
AVDD 3.3V
MVCLAMP 1.7V
MCVREF128 1.7V
MUCLAMP 1.7V
AGND
MUIN 1.7V
AVDD 3.3V
MCVREFL 0.6V
MYVREFH 2.8V
AGND
AVDD 3.3V
MYVREF16 0.8V
MYVCLAMP 0.8V
AGND 0V
MYIN 0.8V
AVDD 3.3V
MYVREFL 0.6V
SCVREFH 2.8V
AGND
SVIN 1.7V
AVDD 3.3V
SVCLAMP 1.7V
SCVREF128 1.7V
SUCLAMP 1.7V
AGND
SUIN 1.7V
AVDD 3.3V
SCVREFL 0.6V
SYVREFH 2.8V
AGND
AVDD 3.3V
SYVREF16 0.8V
SYCLAMP 0.8V
AGND 0V
SYIN 0.8V
AVDD 3.3V
SYVREFL 0.6V
NC
AVDD
VDD
TMODE0
C7739
C7767
C7745
C7768
C7737
C7762
C7763
C7744
C7746
C7769
C7740
C7747
C7748
C7741
C7770
C7749
C7771
C7738
C7752
C7753
C7742
C7750
C7772
C7743
C7751
C7755 100/6.3
R7741 0
C7708 0.1
CM0010AF
IC7703
TMODE1
TMODE2
TMODE3
TMODE4
GND
TDO0
TDO1
TDO2
TDO3
TDO4
TDO5
TDO6
TDO7
GND
GND
GND
VDD
SYS_STOP
FB3
SCPOUT
SVCOIN
SLPFGND 0V
SPLLGND 0V
SPLLVDD 3.3V
SRBIAS
C7733 0.1
R7752 0
C7732 47/6.3
C7731 0.1
L7706
SYNC(1:4)
A 6/9
SVD
SHD
A 5/9
MVD
P3.3V
F7704
ATF1189-A-T
IN
GND
C7756 1500p
R7733 1.0K
R7734 390
C7765 0.068

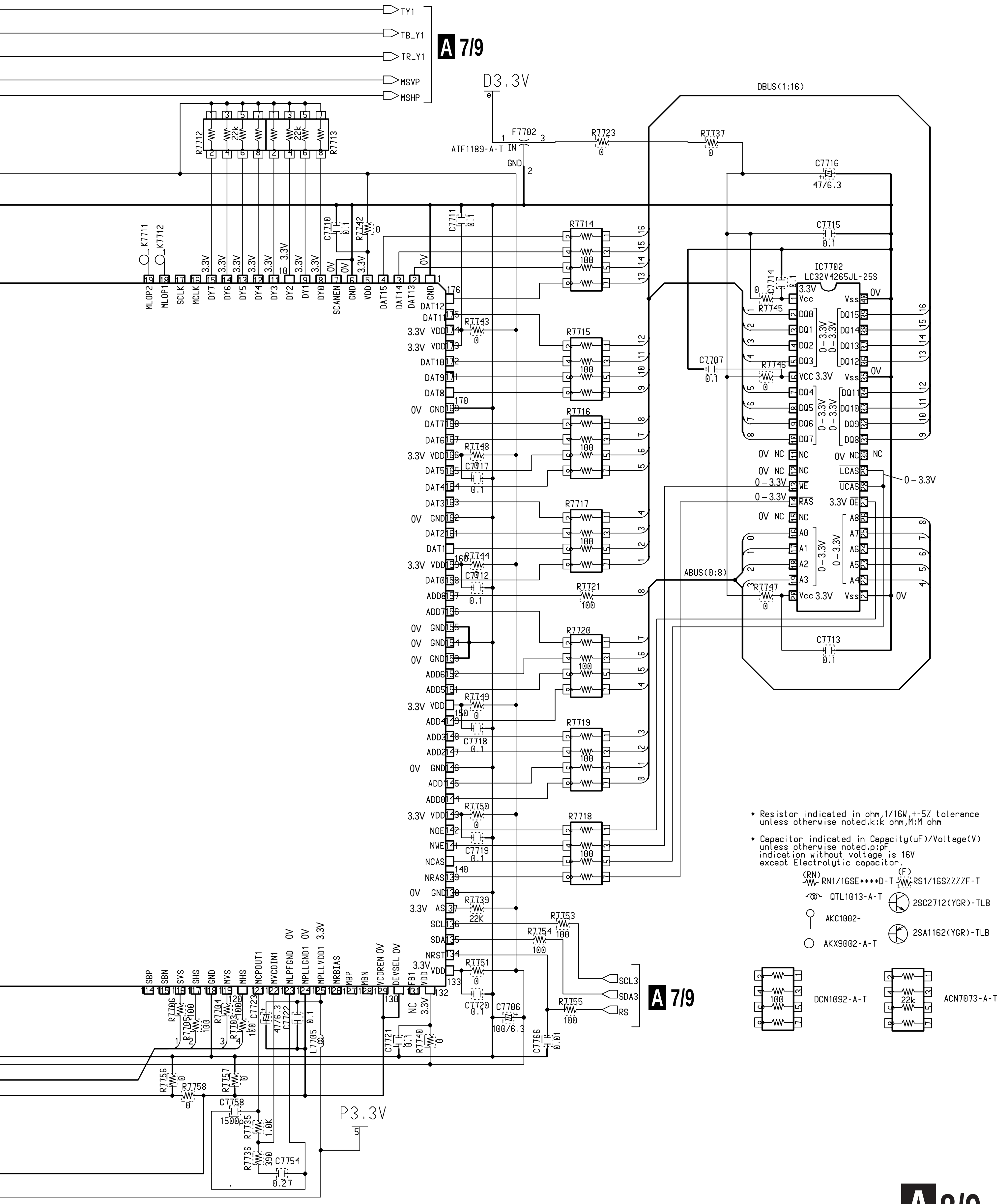
A 8/9

SIGNAL ASSY

(AWV1800 :ELITE)

(AWV1805 :REGULAR)

- TWIN-P (2) BLOCK


TY1
TB_Y1
TR_Y1
MSVP
MSHP
A 7/9
D3.3V
F7702
ATF1189-A-T
IN
GND
R7723
R7737
DBUS(1:16)
C7716
47/6.3
C7715
0.1
R7712
R7713
22k
C7710
R7742
C7711
K7711
K7712
MLOP2
MLOP1
SCLK
MCLK
DY7
DY6
DY5
DY4
DY3
DY2
DY1
DY0
SCANEN
GND
VDD
DAT15
DAT14
DAT13
DAT12
DAT11
DAT10
DAT9
DAT8
DAT7
DAT6
DAT5
DAT4
DAT3
DAT2
DAT1
DAT0
ADD8
ADD7
ADD6
ADD5
ADD4
ADD3
ADD2
ADD1
ADD0
NOE
NWE
NCAS
NRAS
AS
SCL
SDA
NRST
R7714
R7715
R7716
R7717
R7718
R7719
R7720
R7721
100
R7743
R7744
R7748
R7749
R7750
R7739
22K
R7751
C7717
C7712
C7718
C7719
C7720
C7706
100/6.3
C7766
0.01
R7753
R7754
R7755
SCL3
SDA3
RS
A 7/9
IC7702
LC32V4265JL-25S
Vcc
Vss
DQ0
DQ1
DQ2
DQ3
DQ4
DQ5
DQ6
DQ7
DQ8
DQ9
DQ10
DQ11
DQ12
DQ13
DQ14
DQ15
NC
LCAS
UCAS
WE
RAS
OE
A0
A1
A2
A3
A4
A5
A6
A7
A8
C7714
R7745
C7707
R7746
R7747
C7713
ABUS(0:8)
0 – 3.3V
0V
3.3V
SBP
SBN
SVS
SHS
MVS
MHS
MCPOUT1
MVCOIN1
MLPFGND
MPLLGND1
MPLLVDD1
MRBIAS
MBP
MBN
VCOREN
DEVSEL
FB1
R7706
R7705
R7704
R7703
C7723
47/6.3
C7722
L7705
C7721
R7740
R7756
R7757
R7758
C7758
1500p
R7735
1.0k
R7736
390
C7754
0.27
P3.3V
DCN1092-A-T
ACN7073-A-T

- Resistor indicated in ohm,1/16W,+-5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 16V except Electrolytic capacitor.

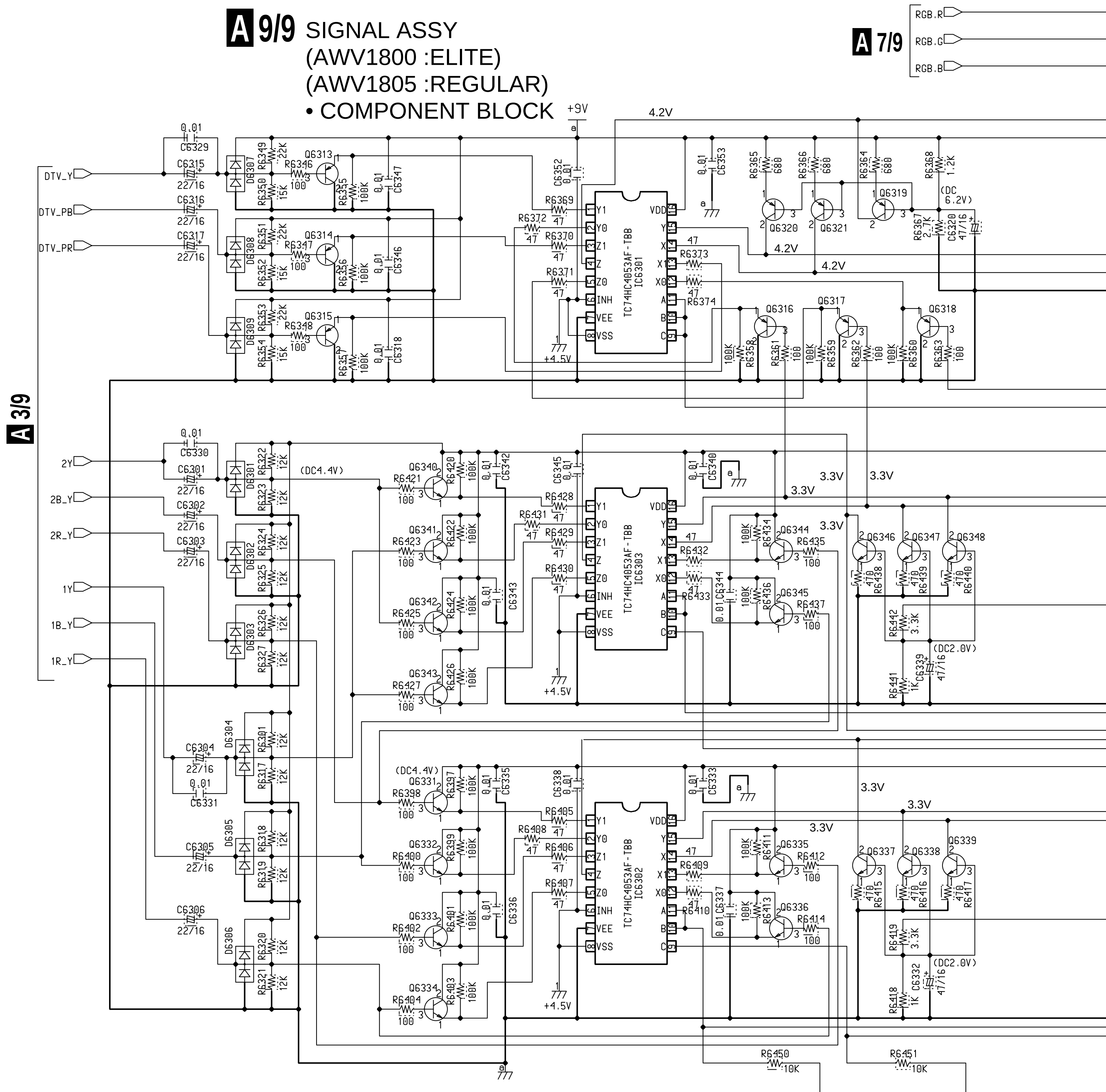
(RN) RN1/16SE∗∗∗∗D-T (F) RS1/16S///F-T

QTL1013-A-T 2SC2712(YGR)-TLB

AKC1002-

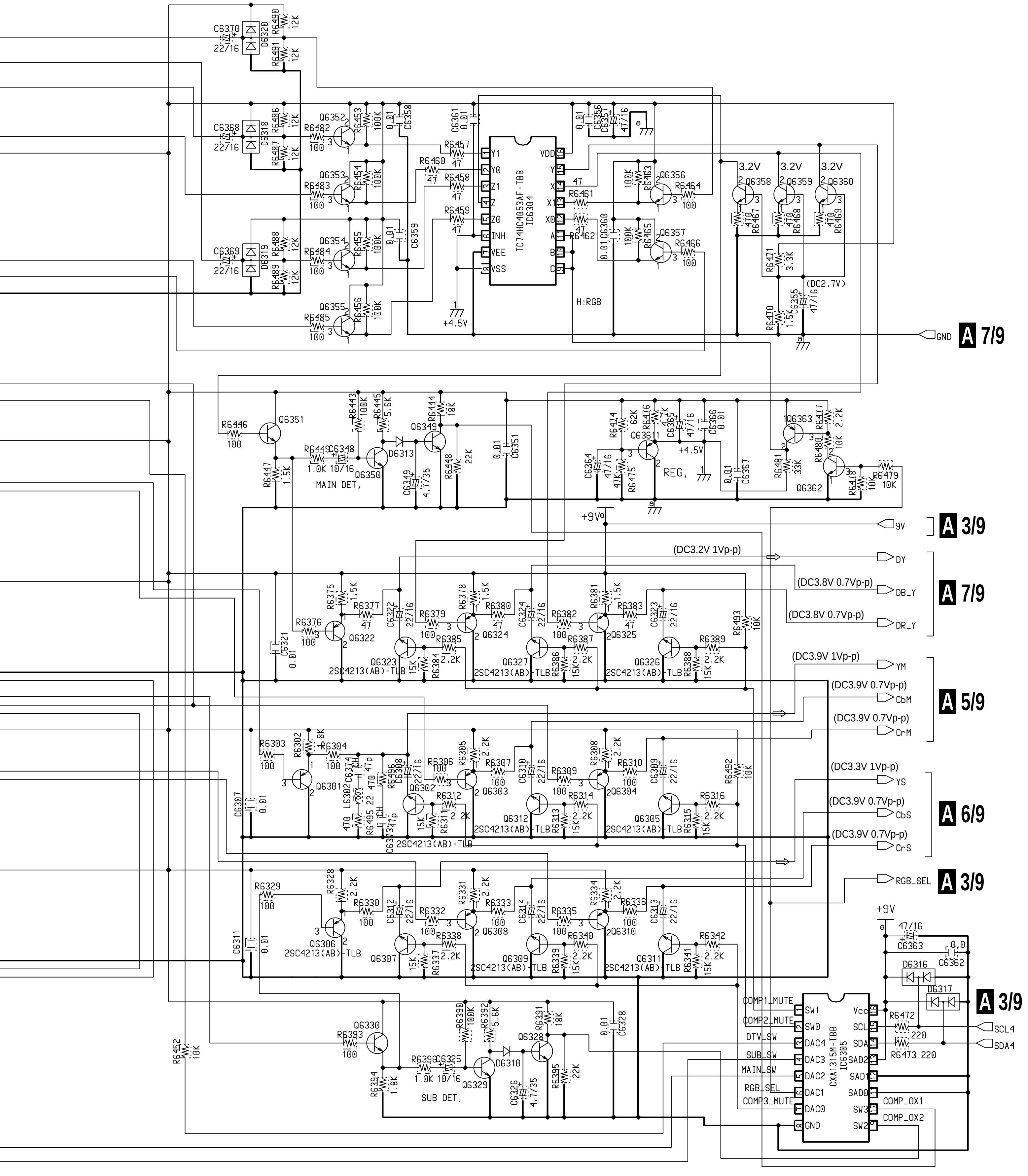
AKX9002-A-T 2SA1162(YGR)-TLB

3.11 SIGNAL ASSY (9/9)

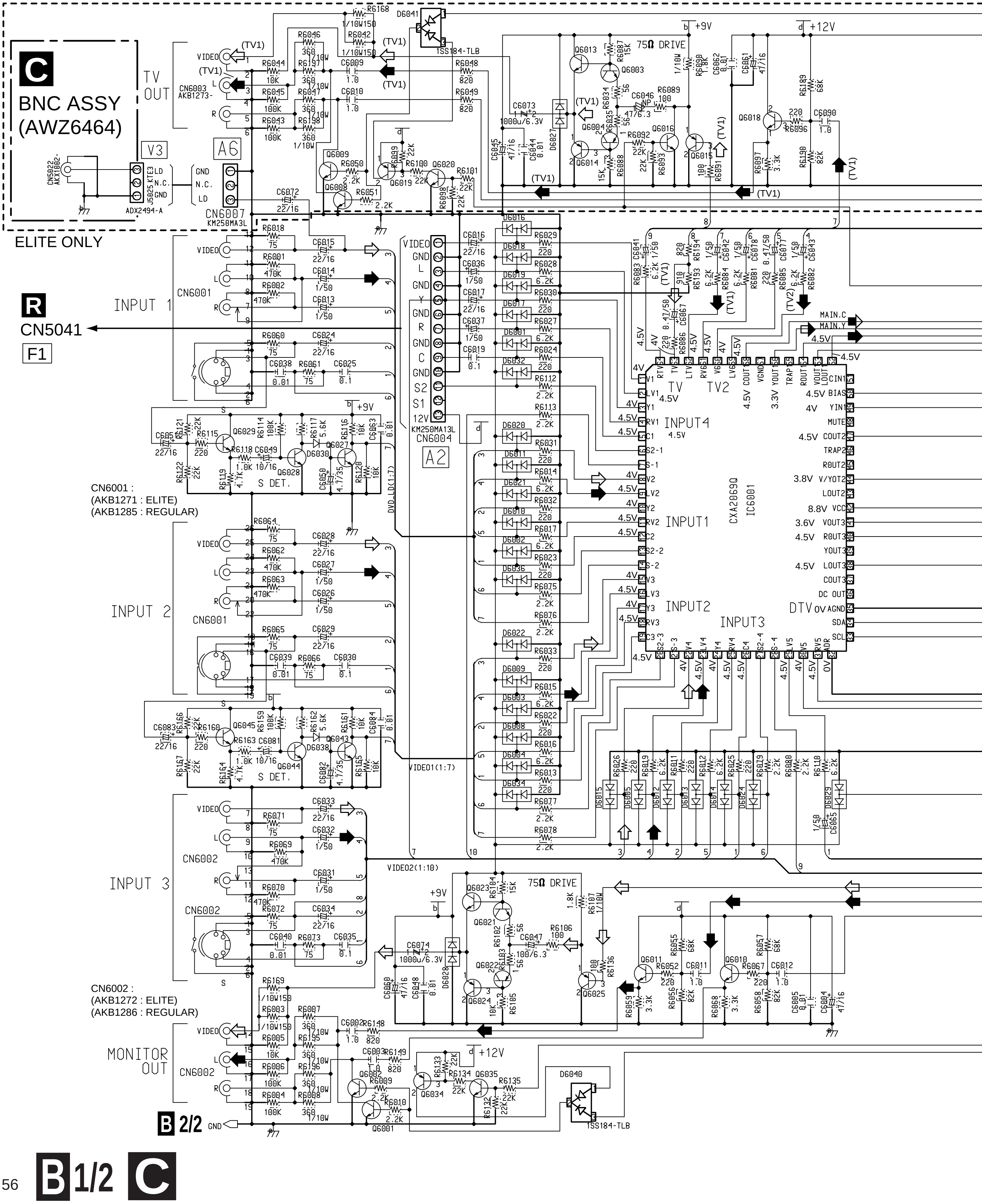

A 9/9 SIGNAL ASSY
(AWV1800 :ELITE)
(AWV1805 :REGULAR)
• COMPONENT BLOCK
A 7/9
RGB.R
RGB.G
RGB.B
A 3/9
DTV_Y
DTV_PB
DTV_PR
2Y
2B_Y
2R_Y
1Y
1B_Y
1R_Y
+9V
4.2V
TC74HC4053AF-TBB IC6301
TC74HC4053AF-TBB IC6303
TC74HC4053AF-TBB IC6302
Q6313
Q6314
Q6315
Q6316
Q6317
Q6318
Q6319
Q6320
Q6321
Q6340
Q6341
Q6342
Q6343
Q6344
Q6345
Q6346
Q6347
Q6348
Q6331
Q6332
Q6333
Q6334
Q6335
Q6336
Q6337
Q6338
Q6339
(DC 6.2V)
(DC4.4V)
(DC2.0V)
3.3V
+4.5V
R6450 10K
R6451 10K

2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS226-TRB
1SS352-TRB

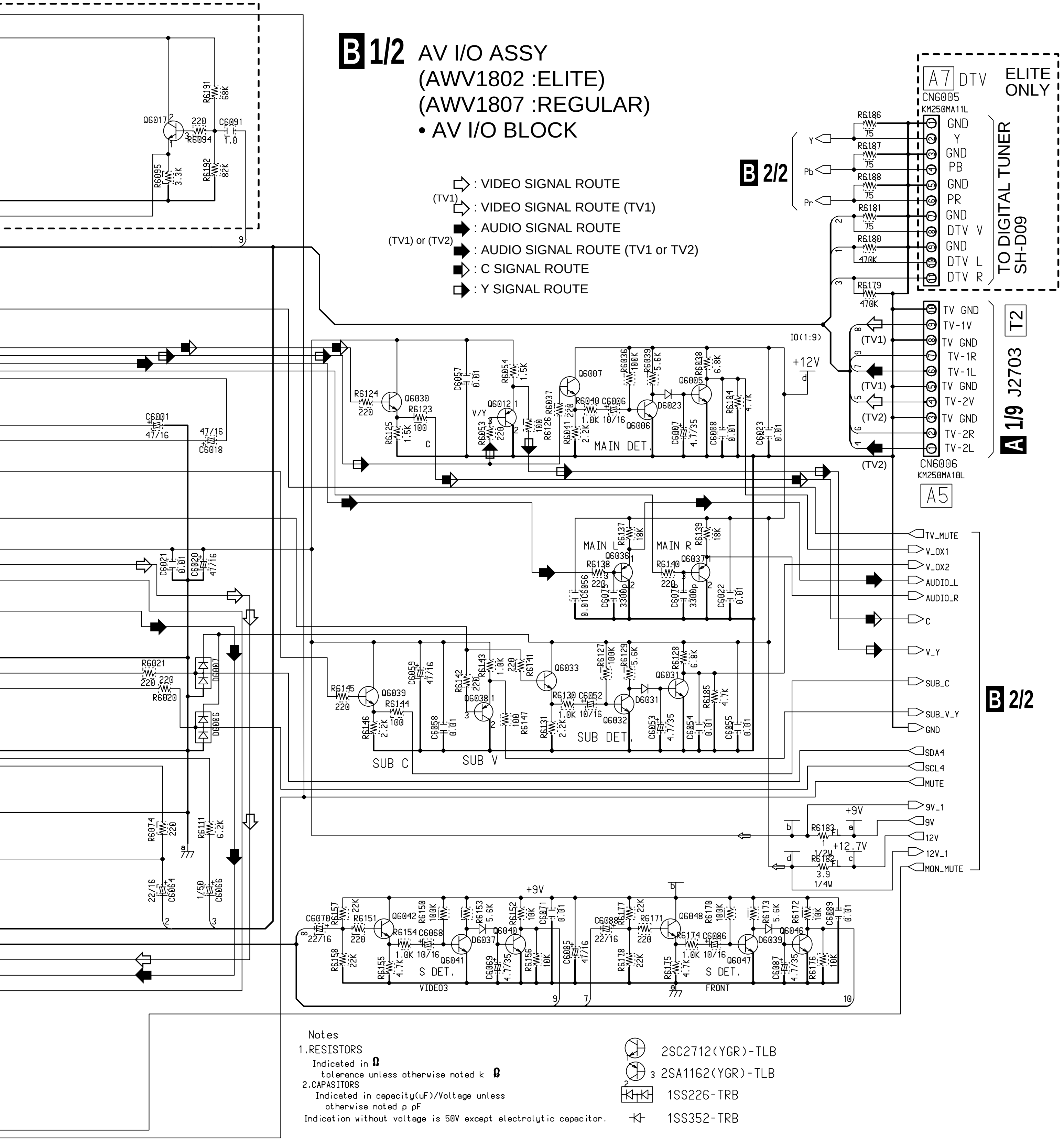
Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k Ω
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless
otherwise noted p pF
Indication without voltage is 50V except electrolytic capacitor.


C6370
22/16
D6320
R6490
12K
R6491
12K
C6368
22/16
D6318
R6486
12K
R6487
12K
Q6352
R6482
100
R6453
100K
0.01
C6358
C6361
0.01
R6457
47
R6460
47
R6458
47
R6459
47
Q6353
R6483
100
R6454
100K
C6369
22/16
D6319
R6488
12K
R6489
12K
Q6354
R6484
100
R6455
100K
0.01
C6359
Q6355
R6485
100
R6456
100K
+4.5V
Y1
Y0
Z1
Z
Z0
INH
VEE
VSS
VDD
Y
X
X1
X0
A
B
C
TC74HC4053AF-TBB
IC6304
H:RGB
0.01
C6356
C6357
47/16
R6461
R6462
47
C6360
0.01
R6463
100K
Q6356
R6464
100
R6465
100K
Q6357
R6466
100
3.2V
Q6358
Q6359
Q6360
R6467
470
R6468
470
R6469
470
R6471
3.3K
(DC2.7V)
R6470
1.5K
C6355
47/16
GND
A 7/9
Q6351
R6446
100
R6447
1.5K
R6449
1.0K
C6348
10/16
Q6350
MAIN DET,
R6443
100K
R6445
5.6K
D6313
Q6349
R6444
18K
C6349
4.7/35
R6448
22K
0.01
C6351
R6414
62K
R6416
4.7K
C6365
47/16
C6366
0.01
Q6361
+4.5V
C6364
47/16
47K
R6475
REG,
0.01
C6367
Q6363
R6417
2.2K
R6480
10K
R6481
33K
Q6362
R6478
10K
R6479
10K
+9V
9V
A 3/9
(DC3.2V 1Vp-p)
DY
(DC3.8V 0.7Vp-p)
DB_Y
(DC3.8V 0.7Vp-p)
DR_Y
A 7/9
R6375
1.5K
R6377
47
R6376
100
Q6322
C6322
22/16
R6379
100
Q6323
R6385
2.2K
R6384
15K
2SC4213(AB)-TLB
R6378
1.5K
R6380
47
Q6324
C6324
22/16
R6382
100
R6387
2.2K
Q6327
R6386
15K
R6381
1.5K
R6383
47
Q6325
C6323
22/16
R6389
2.2K
Q6326
R6388
15K
R6493
10K
C6321
0.01
(DC3.9V 1Vp-p)
YM
(DC3.9V 0.7Vp-p)
CbM
(DC3.9V 0.7Vp-p)
CrM
A 5/9
R6303
100
R6302
1.8K
R6304
100
Q6301
C6374
47p
L6302
22
R6496
470
C6308
22/16
R6495
470
C6373
47p
Q6302
R6306
100
R6305
2.2K
R6312
2.2K
R6311
15K
Q6303
R6307
100
C6310
22/16
R6309
100
R6314
2.2K
Q6312
R6313
15K
R6308
2.2K
R6310
100
Q6304
C6309
22/16
R6316
2.2K
Q6305
R6315
15K
R6492
10K
C6307
0.01
(DC3.3V 1Vp-p)
YS
(DC3.9V 0.7Vp-p)
CbS
(DC3.9V 0.7Vp-p)
CrS
A 6/9
RGB_SEL
A 3/9
R6329
100
R6328
2.2K
R6330
100
Q6306
C6312
22/16
R6332
100
R6338
2.2K
Q6307
R6337
15K
R6331
2.2K
R6333
100
Q6308
C6314
22/16
R6335
100
R6340
2.2K
Q6309
R6339
15K
R6334
2.2K
R6336
100
Q6310
C6313
22/16
R6342
2.2K
Q6311
R6341
15K
C6311
0.01
+9V
47/16
C6363
0.01
C6362
D6316
D6317
A 3/9
Q6330
R6393
100
R6394
1.8K
R6452
10K
R6396
1.0K
C6325
10/16
Q6329
SUB DET,
R6390
100K
R6392
5.6K
D6310
Q6328
R6391
18K
C6326
4.7/35
R6395
22K
0.01
C6328
COMP1_MUTE
COMP2_MUTE
DTV_SW
SUB_SW
MAIN_SW
RGB_SEL
COMP3_MUTE
SW1
SW0
DAC4
DAC3
DAC2
DAC1
DAC0
GND
Vcc
SCL
SDA
SAD2
SAD1
SAD0
SW3
SW2
CXA1315M-TBB
IC6305
R6472
220
R6473 220
SCL4
SDA4
COMP_OX1
COMP_OX2

3.12 AV I/O (1/2) and BNC ASSYS


C
BNC ASSY
(AWZ6464)
TV OUT
CN6003 AKB1273-
V3
A6
CN6007 KM250MA3L
ADX2494-A
ELITE ONLY
R
CN5041
F1
INPUT 1
CN6001
CN6001 :
(AKB1271 : ELITE)
(AKB1285 : REGULAR)
INPUT 2
S DET.
INPUT 3
CN6002
CN6002 :
(AKB1272 : ELITE)
(AKB1286 : REGULAR)
MONITOR OUT
B 2/2
GND
CN6004 KM250MA13L
A2
VIDEO
GND
L
Y
R
C
S2
S1
12V
DVD_LD(1:7)
VIDEO1(1:7)
VIDEO2(1:10)
75Ω DRIVE
+9V
+12V
(TV1)
(TV2)
D6041 1SS184-TLB
D6040 1SS184-TLB
CXA2069Q
IC6001
INPUT4
INPUT1
INPUT2
INPUT3
TV
TV2
DTV
MAIN.C
MAIN.Y
1
2
3
4
A
B
C
D

B 1/2 C



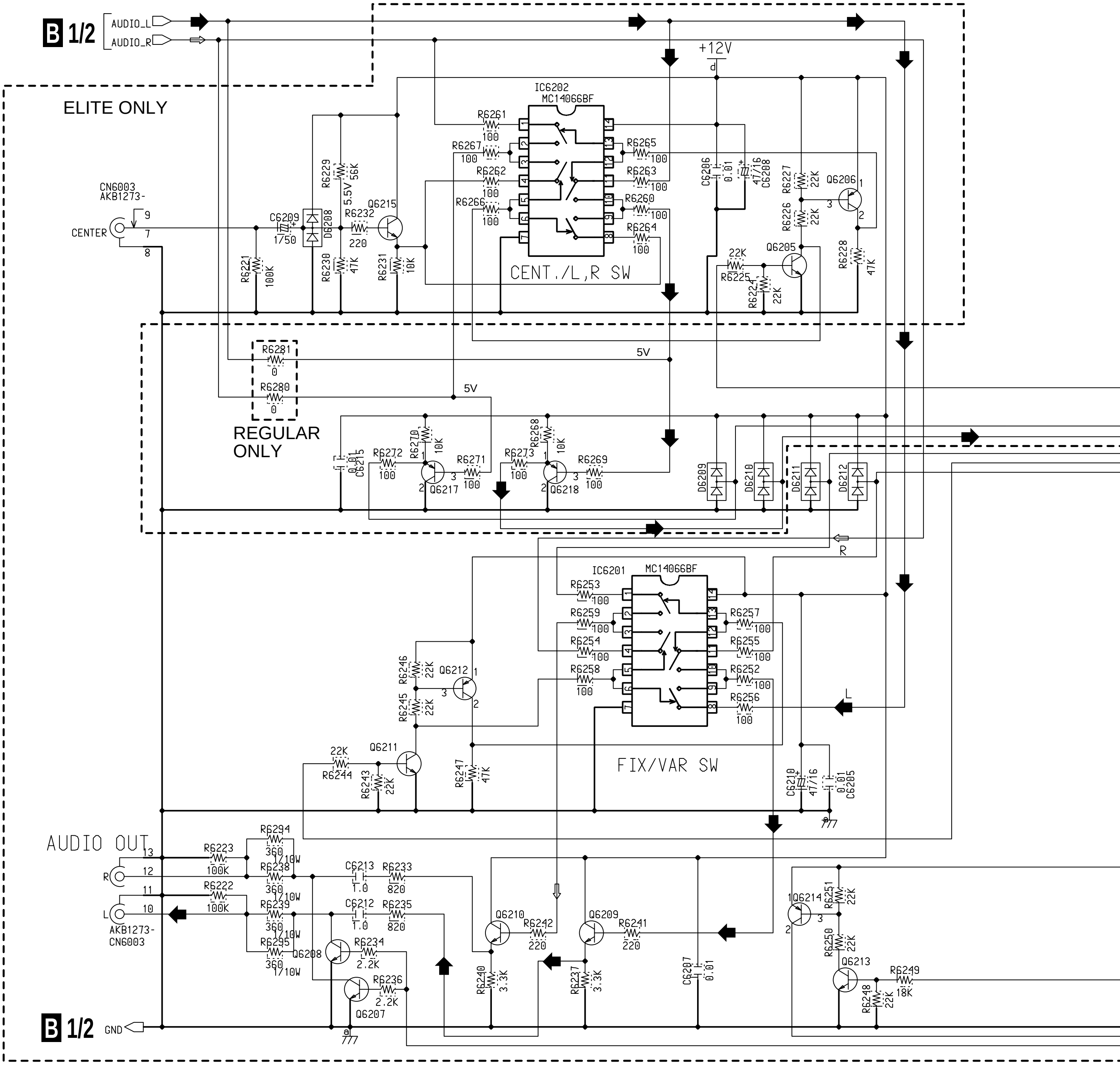
B 1/2 AV I/O ASSY
(AWV1802 :ELITE)
(AWV1807 :REGULAR)
• AV I/O BLOCK

- : VIDEO SIGNAL ROUTE
- (TV1) : VIDEO SIGNAL ROUTE (TV1)
- : AUDIO SIGNAL ROUTE
- (TV1) or (TV2) : AUDIO SIGNAL ROUTE (TV1 or TV2)
- : C SIGNAL ROUTE
- : Y SIGNAL ROUTE

Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k Ω
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless
otherwise noted p pF
Indication without voltage is 50V except electrolytic capacitor.

2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS226-TRB
1SS352-TRB
A7 DTV
ELITE ONLY
CN6005
KM250MA11L
GND
Y
GND
PB
GND
PR
GND
DTV V
GND
DTV L
DTV R
TO DIGITAL TUNER SH-D09
B 2/2
Y
Pb
Pr
R6186 75
R6187 75
R6188 75
R6181 75
R6180 470K
R6179 470K
T2
J2703
A 1/9
CN6006
KM250MA10L
A5
TV GND
TV-1V
TV GND
TV-1R
TV-1L
TV GND
TV-2V
TV GND
TV-2R
TV-2L
(TV1)
(TV2)
IO(1:9)
+12V
Q6017
R6191 68K
R6094 220
C6091 1.0
R6095 3.3K
R6192 82K
Q6030
R6124 220
R6123 100
R6125 1.5K
C6057 0.01
Q6012
V/Y
R6054 1.5K
R6053 220
R6037 100
R6126
Q6007
R6040 1.0K
C6006 10/16
R6041 2.2K
R6036 100K
R6039 5.6K
Q6006
D6023
Q6005
R6038 6.8K
R6184 4.7K
C6007 4.7/35
C6008 0.01
C6023 0.01
MAIN DET.
C6001 47/16
C6018 47/16
MAIN L
MAIN R
Q6036
Q6037
R6137 18K
R6139 18K
R6138 220
R6140 220
C6056 0.01
C6075 3300p
C6076 3300p
C6022 0.01
C6021 0.01
C6020 47/16
TV_MUTE
V_OX1
V_OX2
AUDIO_L
AUDIO_R
C
V_Y
SUB_C
SUB_V_Y
GND
SDA4
SCL4
MUTE
9V_1
9V
12V
12V_1
MON_MUTE
R6021 220
R6020 220
D6007
D6006
Q6039
R6145 220
R6144 100
R6146 2.2K
C6059 47/16
C6058 0.01
R6142 220
R6143 1.0K
Q6038
R6147 100
R6141 220
Q6033
R6127 100K
R6129 5.6K
R6130 1.0K
C6052 10/16
R6131 2.2K
Q6032
D6031
Q6031
R6128 6.8K
R6185 4.7K
C6053 4.7/35
C6054 0.01
C6055 0.01
SUB DET.
SUB C
SUB V
+9V
R6183 FL
R6182 FL 3.9 1/4W
+12.7V
R6074 220
R6111 6.2K
C6064 22/16
C6066 1/50
C6070 22/16
R6157 22K
R6151 220
Q6042
R6150 100K
R6154 1.0K
C6068 10/16
R6153 5.6K
D6037
Q6040
Q6041
R6152 10K
C6071 0.01
R6158 22K
R6155 4.7K
C6069 4.7/35
R6156 10K
S DET.
VIDEO3
C6085 47/16
C6088 22/16
R6177 22K
R6171 220
Q6048
R6170 100K
R6174 1.0K
C6086 10/16
R6173 5.6K
D6039
Q6046
Q6047
R6172 10K
C6089 0.01
R6178 22K
R6175 4.7K
C6087 4.7/35
R6176 10K
S DET.
FRONT

3.13 AV I/O (2/2) and SR ASSYS

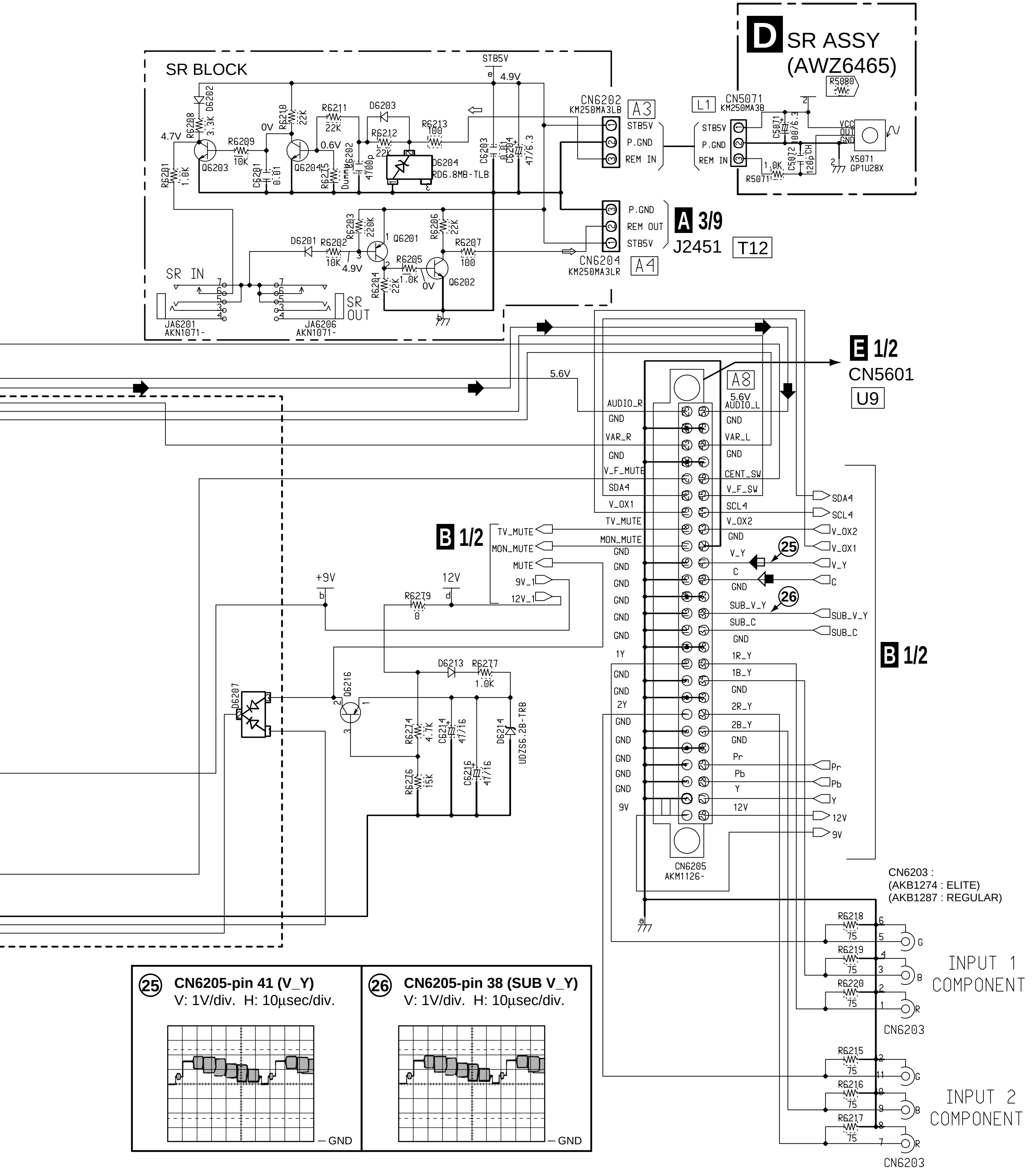

B 1/2
AUDIO_L
AUDIO_R
ELITE ONLY
+12V
IC6202
MC14066BF
CENT./L,R SW
CN6003
AKB1273-
CENTER
C6209
1/50
D6208
R6229 56K
5.5V
R6232 220
Q6215
R6221 100K
R6230 47K
R6231 10K
R6261 100
R6267 100
R6262 100
R6266 100
R6265 100
R6263 100
R6260 100
R6264 100
C6206 0.01
C6208 47/16
R6227 22K
R6226 22K
Q6206
Q6205
R6225 22K
R6224 22K
R6228 47K
R6281 0
R6280 0
REGULAR ONLY
5V
C6215 0.01
R6272 100
R6270 10K
Q6217
R6271 100
R6273 100
R6268 10K
Q6218
R6269 100
D6209
D6210
D6211
D6212
R
L
IC6201
MC14066BF
FIX/VAR SW
R6253 100
R6259 100
R6254 100
R6258 100
R6257 100
R6255 100
R6252 100
R6256 100
R6246 22K
R6245 22K
Q6212
Q6211
R6244 22K
R6243 22K
R6247 47K
C6210 47/16
C6205 0.01
AUDIO OUT
R6223 100K
R6222 100K
R6294 360 1/10W
R6238 360 1/10W
R6239 360 1/10W
R6295 360 1/10W
C6213 1.0
C6212 1.0
R6233 820
R6235 820
AKB1273-
CN6003
Q6208
R6234 2.2K
R6236 2.2K
Q6207
Q6210
R6242 220
Q6209
R6241 220
R6240 3.3K
R6237 3.3K
C6207 0.01
Q6214
R6251 22K
R6250 22K
Q6213
R6249 18K
R6248 22K
B 1/2
GND

B 2/2 AV I/O ASSY
(AWV1802 :ELITE)
(AWV1807 :REGULAR)
• AV I/O and SR BLOCKS

Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k Ω
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless
otherwise noted p pF
Indication without voltage is 50V except electrolytic capacitor.

2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS352-TRB

➡ : AUDIO SIGNAL ROUTE
➡ : C SIGNAL ROUTE
⇨ : Y SIGNAL ROUTE

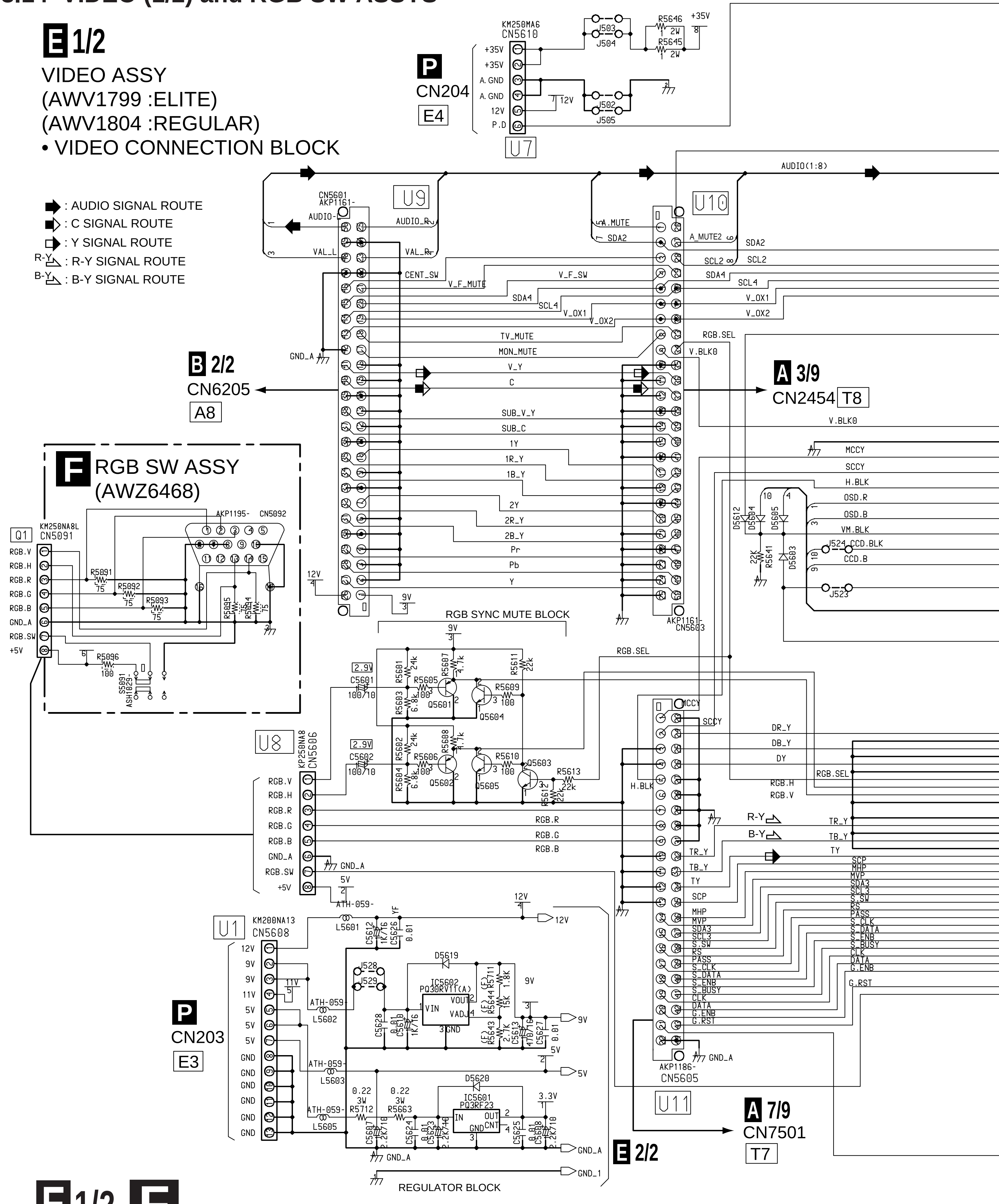

SR BLOCK
STB5V
4.9V
R6208 3.3K
D6202
4.7V
R6210 22K
0V
R6211 22K
D6203
R6213 100
R6212 22K
R6209 10K
0.6V
Q6203
Q6204
R6201 1.0K
C6201 0.01
R6215 Dummy
C6202 4700p
D6204 RD6.8MB-TLB
C6203 0.01
C6204 47/6.3
CN6202 KM250MA3LB
A3
STB5V
P.GND
REM IN
P.GND
REM OUT
STB5V
CN6204 KM250MA3LR
A4
A 3/9
J2451
T12
D6201
R6202 10K
R6203 220K
Q6201
R6206 22K
R6207 100
R6205 1.0K
4.9V
R6204 22K
0V
Q6202
SR IN
SR OUT
JA6201 AKN1071-
JA6206 AKN1071-
D SR ASSY (AWZ6465)
R5080
L1
CN5071 KM250MA3B
C5071 100/6.3
C5072 126p CH
R5071 1.0K
VCC
OUT
GND
X5071 GP1U28X
E 1/2
CN5601
U9
5.6V
A8
AUDIO_R
AUDIO_L
GND
VAR_R
VAR_L
V_F_MUTE
CENT_SW
SDA4
V_F_SW
V_OX1
SCL4
TV_MUTE
V_OX2
MON_MUTE
V_Y
C
SUB_V_Y
SUB_C
1Y
1R_Y
1B_Y
2Y
2R_Y
2B_Y
Pr
Pb
Y
9V
12V
CN6205 AKM1126-
B 1/2
TV_MUTE
MON_MUTE
MUTE
9V_1
12V_1
+9V
12V
R6279 0
D6213
R6277 1.0K
D6207
Q6216
R6274 4.7K
C6214 47/16
D6214 UDZS6.2B-TRB
R6276 15K
C6216 47/16
25
26
CN6203 : (AKB1274 : ELITE) (AKB1287 : REGULAR)
R6218 75
R6219 75
R6220 75
INPUT 1 COMPONENT
R6215 75
R6216 75
R6217 75
INPUT 2 COMPONENT
CN6203
G
B
R
GND

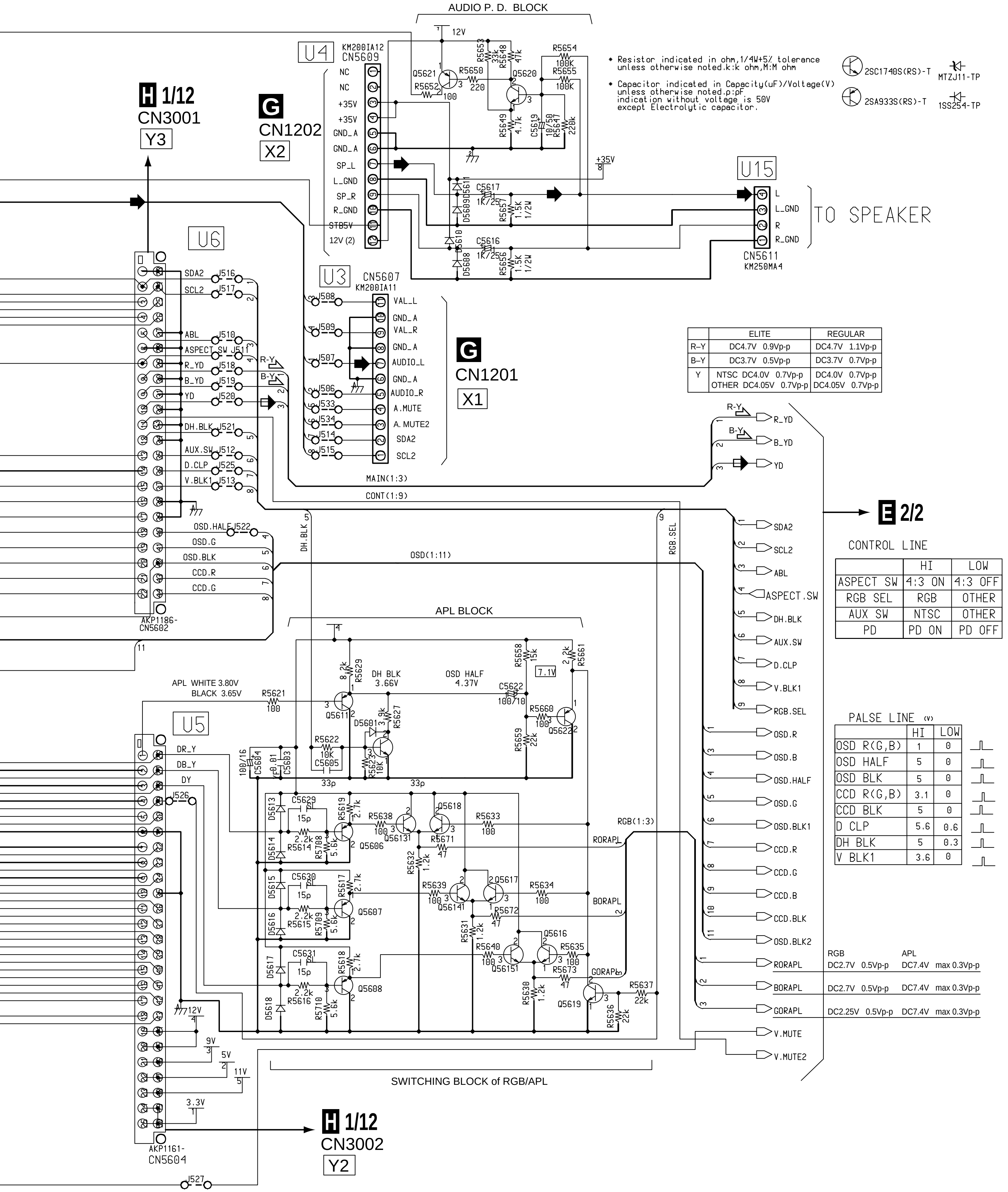
㉕ **CN6205-pin 41 (V_Y)**
V: 1V/div. H: 10µsec/div.

㉖ **CN6205-pin 38 (SUB V_Y)**
V: 1V/div. H: 10µsec/div.

3.14 VIDEO (1/2) and RGB SW ASSYS

E 1/2
VIDEO ASSY
(AWV1799 :ELITE)
(AWV1804 :REGULAR)
• VIDEO CONNECTION BLOCK


: AUDIO SIGNAL ROUTE
: C SIGNAL ROUTE
: Y SIGNAL ROUTE
R-Y : R-Y SIGNAL ROUTE
B-Y : B-Y SIGNAL ROUTE
P
CN204
E4
KM250MA6
CN5610
+35V
+35V
A.GND
A.GND
12V
P.D
U7
J503
J504
J502
J505
R5646 2W
R5645 2W
+35V
12V
AUDIO(1:8)
CN5601
AKP1161-
U9
AUDIO_L
AUDIO_R
VAL_L
VAL_R
CENT_SW
V_F_MUTE
V_F_SW
SDA4
SCL4
V_OX1
V_OX2
TV_MUTE
MON_MUTE
V_Y
C
SUB_V_Y
SUB_C
1Y
1R_Y
1B_Y
2Y
2R_Y
2B_Y
Pr
Pb
Y
GND_A
U10
A.MUTE
SDA2
A_MUTE2
SCL2
RGB.SEL
V.BLK0
AKP1161-
CN5603
B 2/2
CN6205
A8
A 3/9
CN2454
T8
MCCY
SCCY
H.BLK
OSD.R
OSD.B
VM.BLK
CCD.BLK
CCD.B
J524
J523
D5612
D5604
D5605
D5603
R5641 22K
F
RGB SW ASSY
(AWZ6468)
Q1
KM250NA8L
CN5091
AKP1195-
CN5092
RGB.V
RGB.H
RGB.R
RGB.G
RGB.B
GND_A
RGB.SW
+5V
R5091 75
R5092 75
R5093 75
R5095
R5094
R5096 100
S5091 ASH1029-
12V
9V
RGB SYNC MUTE BLOCK
2.9V
C5601 100/10
C5602 100/10
R5601 24k
R5602 24k
R5603 6.8k
R5604 6.8k
R5605 100
R5606 100
R5607 4.7k
R5608 4.7k
R5609 100
R5610 100
R5611 22k
R5612 22k
R5613 22k
Q5601
Q5602
Q5603
Q5604
Q5605
U8
KP250NA8
CN5606
MCCY
SCCY
DR_Y
DB_Y
DY
H.BLK
RGB.H
RGB.V
RGB.R
RGB.G
RGB.B
R-Y
B-Y
TR_Y
TB_Y
TY
SCP
MHP
MVP
SDA3
SCL3
S.SW
RS
PASS
S_CLK
S_DATA
S_ENB
S_BUSY
CLK
DATA
G.ENB
G.RST
AKP1186-
CN5605
U11
GND_A
A 7/9
CN7501
T7
E 2/2
U1
KM200NA13
CN5608
P
CN203
E3
12V
9V
9V
11V
5V
5V
5V
GND
ATH-059-
L5601
L5602
L5603
L5605
C5612 1K/16
C5626 0.01
J528
J529
D5619
IC5602
PQ30RV11(A)
VIN
VOUT
VADJ
GND
R5711 1.8k
R5644 15k
R5643 2.7k
C5628 0.01
C5610 1K/16
C5613 470/16
C5627 0.01
D5620
IC5601
PQ3RF23
IN
OUT
CNT
0.22 3W R5712
0.22 3W R5663
C5607 2.2K/10
C5624 0.01
C5623 2.2K/10
C5625 0.01
C5608 2.2K/10
3.3V
GND_A
GND_1
REGULATOR BLOCK


AUDIO P. D. BLOCK
APL BLOCK
SWITCHING BLOCK of RGB/APL
H 1/12
CN3001
Y3
G
CN1202
X2
U4
KM200IA12
CN5609
U15
CN5611
KM250MA4
TO SPEAKER
U6
U3
CN5607
KM200IA11
G
CN1201
X1
U5
AKP1186-
CN5602
AKP1161-
CN5604
E 2/2
H 1/12
CN3002
Y2
MAIN(1:3)
CONT(1:9)
OSD(1:11)
RGB(1:3)
APL WHITE 3.80V
BLACK 3.65V
DH BLK
3.66V
OSD HALF
4.37V
RGB
DC2.7V 0.5Vp-p
DC2.7V 0.5Vp-p
DC2.25V 0.5Vp-p
APL
DC7.4V max 0.3Vp-p
DC7.4V max 0.3Vp-p
DC7.4V max 0.3Vp-p
R_YD
B_YD
YD
SDA2
SCL2
ABL
ASPECT.SW
DH.BLK
AUX.SW
D.CLP
V.BLK1
RGB.SEL
OSD.R
OSD.B
OSD.HALF
OSD.G
OSD.BLK1
CCD.R
CCD.G
CCD.B
CCD.BLK
OSD.BLK2
RORAPL
BORAPL
GORAPL
V.MUTE
V.MUTE2

- Resistor indicated in ohm,1/4W+5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.

2SC1740S(RS)-T
MTZJ11-TP
2SA933S(RS)-T
1SS254-TP

	ELITE	REGULAR
R–Y	DC4.7V 0.9Vp-p	DC4.7V 1.1Vp-p
B–Y	DC3.7V 0.5Vp-p	DC3.7V 0.7Vp-p
Y	NTSC DC4.0V 0.7Vp-p OTHER DC4.05V 0.7Vp-p	DC4.0V 0.7Vp-p DC4.05V 0.7Vp-p

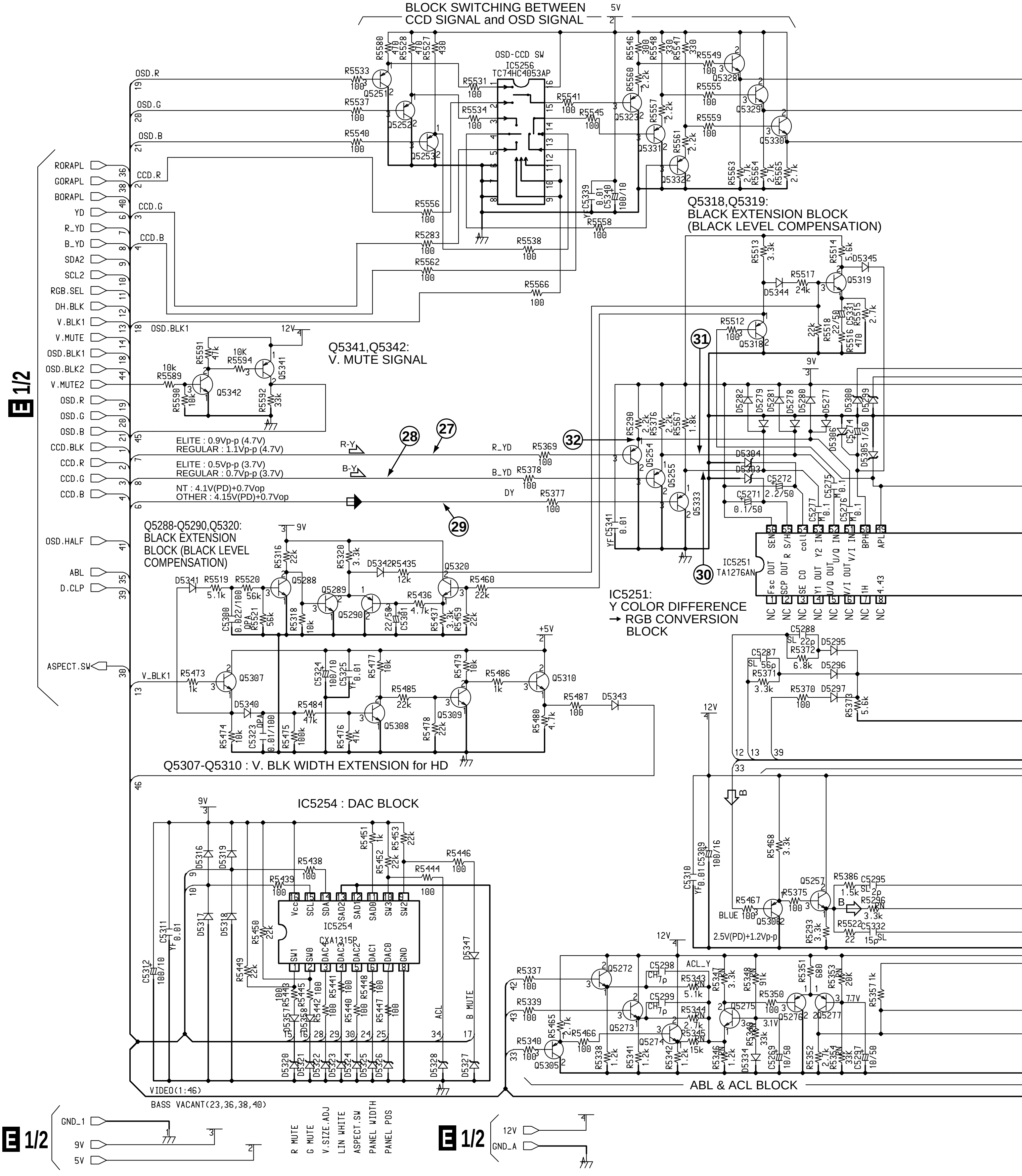
CONTROL LINE

	HI	LOW
ASPECT SW	4:3 ON	4:3 OFF
RGB SEL	RGB	OTHER
AUX SW	NTSC	OTHER
PD	PD ON	PD OFF

PALSE LINE (V)

	HI	LOW
OSD R(G,B)	1	0
OSD HALF	5	0
OSD BLK	5	0
CCD R(G,B)	3.1	0
CCD BLK	5	0
D CLP	5.6	0.6
DH BLK	5	0.3
V BLK1	3.6	0

3.15 VIDEO ASSY (2/2)


BLOCK SWITCHING BETWEEN
CCD SIGNAL and OSD SIGNAL
5V
OSD-CCD SW
IC5256
TC74HC4053AP
Q5318,Q5319:
BLACK EXTENSION BLOCK
(BLACK LEVEL COMPENSATION)
Q5341,Q5342:
V. MUTE SIGNAL
Q5288-Q5290,Q5320:
BLACK EXTENSION
BLOCK (BLACK LEVEL
COMPENSATION)
IC5251:
Y COLOR DIFFERENCE
→ RGB CONVERSION
BLOCK
IC5251
TA1276AN
Q5307-Q5310 : V. BLK WIDTH EXTENSION for HD
IC5254 : DAC BLOCK
IC5254
CXA1315P
ABL & ACL BLOCK
ELITE : 0.9Vp-p (4.7V)
REGULAR : 1.1Vp-p (4.7V)
ELITE : 0.5Vp-p (3.7V)
REGULAR : 0.7Vp-p (3.7V)
NT : 4.1V(PD)+0.7Vop
OTHER : 4.15V(PD)+0.7Vop
2.5V(PD)+1.2Vp-p
R-Y
B-Y
R_YD
B_YD
DY
BLUE
ACL_Y
E 1/2
RORAPL
GORAPL
BORAPL
YD
R_YD
B_YD
SDA2
SCL2
RGB.SEL
DH.BLK
V.BLK1
V.MUTE
OSD.BLK1
OSD.BLK2
V.MUTE2
OSD.R
OSD.G
OSD.B
CCD.BLK
CCD.R
CCD.G
CCD.B
OSD.HALF
ABL
D.CLP
ASPECT.SW
OSD.R
OSD.G
OSD.B
CCD.R
CCD.G
CCD.B
OSD.BLK1
V_BLK1
VIDEO(1:46)
BASS VACANT(23,36,38,40)
GND_1
9V
5V
12V
GND_A
R MUTE
G MUTE
V.SIZE.ADJ
LIN WHITE
ASPECT.SW
PANEL WIDTH
PANEL POS
ACL
B MUTE
12V
9V
+5V
Vcc
SCL
SDA
SAD2
SAD1
SAD0
SW3
SW2
SW1
SW0
DAC4
DAC3
DAC2
DAC1
DAC0
GND
SEN
R S/H
coll
Y2 IN
U/O IN
V/I IN
BPH
APL
Fsc OUT
SCP OUT
SE CO
Y1 OUT
U/O OUT
V/I OUT
1H
4.43
NC
28
27
29
30
31
32
Q5251
Q5252
Q5253
Q5323
Q5331
Q5332
Q5328
Q5329
Q5330
Q5318
Q5319
Q5341
Q5342
Q5254
Q5255
Q5333
Q5288
Q5289
Q5290
Q5320
Q5307
Q5308
Q5309
Q5310
Q5257
Q5306
Q5272
Q5273
Q5274
Q5275
Q5276
Q5277
Q5305
R5580 470
R5528 470
R5527 470
R5533 100
R5537 100
R5540 100
R5531 100
R5534 100
R5541 100
R5545 100
R5546 300
R5548 330
R5547 330
R5560 2.2k
R5557 2.2k
R5561 2.2k
R5549 100
R5555 100
R5559 100
R5563 2.7k
R5564 2.7k
R5565 2.7k
C5339 0.01
C5340 100/10
R5558 100
R5556 100
R5283 100
R5538 100
R5562 100
R5566 100
R5513 3.3k
R5514 5.6k
D5345
R5517 24k
D5344
R5512 100
R5518 22k
C5331 22/50
R5516 470
R5515 2.7k
R5591 47k
R5594 10K
R5589 10k
R5590 10k
R5592 33k
R5369 100
R5378 100
R5377 100
R5290 2.2k
R5376 2.2k
R5567 2.2k
1.8k
C5341 0.01
D5282
D5279
D5281
D5278
D5280
D5277
D5300
D5299
D5306
C5274 1/50
D5305 1/50
D5304
D5303
C5272 2.2/50
C5271 0.1/50
C5277 0.1
C5275 0.1
C5276 0.1
R5316 22k
R5320 3.3k
D5342
R5435 12k
R5460 22k
D5341
R5519 5.1k
R5520 56k
R5521 56k
C5300 0.022/100
R5318 10k
R5436 4.7k
C5301 22/50
R5437 3.3k
R5459 22k
R5473 1k
D5340
C5324 100/10
C5325 0.01
R5477 10k
R5479 10k
R5486 1k
R5485 22k
R5484 47k
R5487 100
D5343
R5474 10k
C5323 0.01/100
R5475 100k
R5476 47k
R5478 22k
R5480 4.7k
C5288 22p
R5372 6.8k
D5295
C5287 56p
R5371 3.3k
D5296
R5370 100
D5297
R5373 5.6k
C5309 100/16
C5310 0.01
R5468 3.3k
R5467 100
R5375 100
R5386 1.5k
C5295 2p
R5296 3.3k
R5522 22
C5332 15p
R5293 3.3k
D5316
D5319
D5317
D5318
C5311 0.01
C5312 100/10
R5450 22k
R5449 22k
R5438 100
R5439 100
R5451 1k
R5452 22k
R5453 22k
R5444 100
R5446 100
D5347
R5443 100
R5445 100
R5442 100
R5441 100
R5440 100
R5448 100
R5447 100
D5357
D5358
D5320
D5321
D5322
D5323
D5324
D5325
D5326
D5328
D5327
R5337 100
R5339 100
R5340 100
R5465 2.7k
R5466 100
C5298 7p
C5299 7p
R5343 5.1k
R5344 4.7k
R5345 15k
R5347 3.3k
R5348 91k
R5350 100
R5351 680
R5353 20k
R5357 1k
R5338 1.2k
R5341 1.2k
R5342 1.2k
R5346 1.2k
D5334
R5349 33k
C5269 10/50
R5352 2.7k
R5354 33k
C5297 10/50
3.1V
7.7V

E 2/2

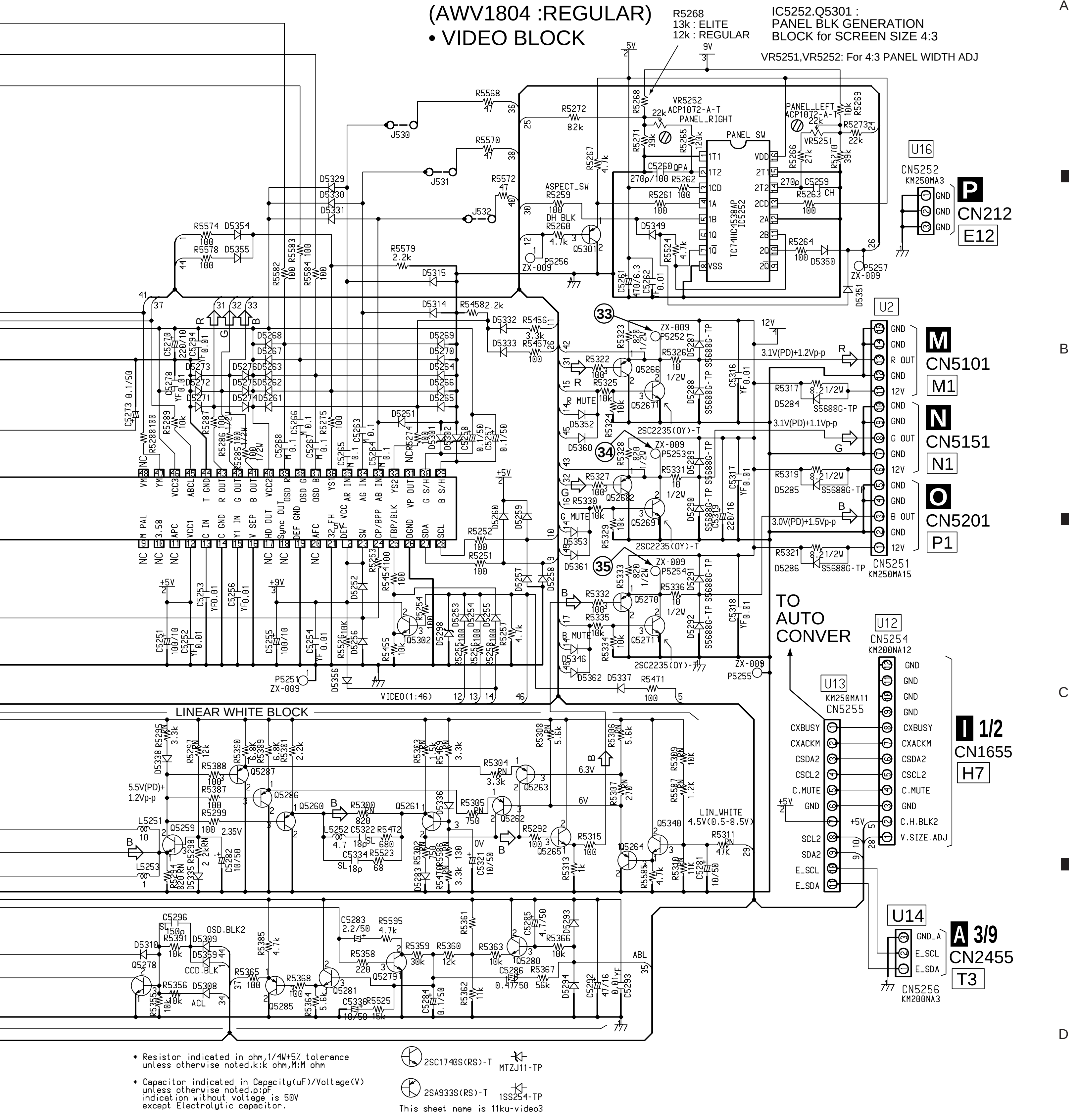
E 2/2 VIDEO ASSY (AWV1799 :ELITE) (AWV1804 :REGULAR) • VIDEO BLOCK

➡ : Y SIGNAL ROUTE
R-Y ⇨ : R-Y SIGNAL ROUTE
B-Y ⇨ : B-Y SIGNAL ROUTE
R, G or B ⇨ : R, G or B SIGNAL ROUTE

R5268
13k : ELITE
12k : REGULAR

IC5252.Q5301 :
PANEL BLK GENERATION
BLOCK for SCREEN SIZE 4:3

VR5251,VR5252: For 4:3 PANEL WIDTH ADJ


PANEL SW
TC74HC4538AP IC5252
VR5252 ACP1072-A-T PANEL_RIGHT
PANEL_LEFT ACP1072-A-T VR5251
ASPECT_SW
DH BLK
J530
J531
J532
U16
CN5252 KM250MA3
P CN212 E12
U2
M CN5101 M1
N CN5151 N1
O CN5201 P1
CN5251 KM250MA15
R OUT
G OUT
B OUT
3.1V(PD)+1.2Vp-p
3.1V(PD)+1.1Vp-p
3.0V(PD)+1.5Vp-p
2SC2235(OY)-T
S5688G-TP
TO AUTO CONVER
U12
CN5254 KM200NA12
U13
CN5255 KM250MA11
CXBUSY
CXACKM
CSDA2
CSCL2
C.MUTE
GND
C.H.BLK2
V.SIZE.ADJ
SCL2
SDA2
E_SCL
E_SDA
I 1/2 CN1655 H7
U14
GND_A
A 3/9 CN2455 T3
CN5256 KM200NA3
LINEAR WHITE BLOCK
LIN_WHITE 4.5V(0.5-8.5V)
5.5V(PD)+ 1.2Vp-p
OSD.BLK2
CCD.BLK
ACL
ABL
VIDEO(1:46)
33
34
35
2SC1740S(RS)-T
MTZJ11-TP
2SA933S(RS)-T
1SS254-TP

• Resistor indicated in ohm,1/4W+5% tolerance unless otherwise noted.k:k ohm,M:M ohm

• Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.

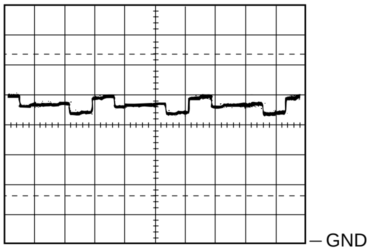
This sheet name is 11ku-video3

A
B
C
D

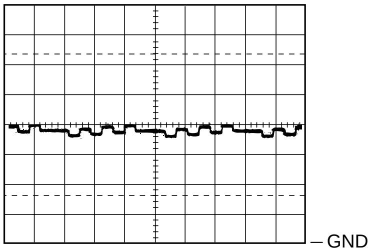
E 2/2 VIDEO ASSY (2/2)

Input signal
Video signal : EIA full color-bar
Picture quality : Standard
Range :DC range (Unless otherwise noted)

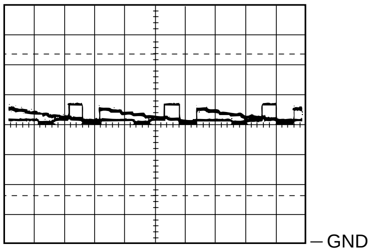
㉗ Foot of R5369 (Sharpness output R-Y)
V: 1V/div. H: 10µsec/div.



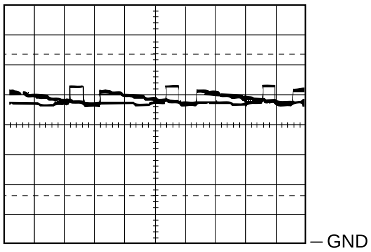
㉘ Foot of R5378 (Sharpness output B-Y)
V: 1V/div. H: 10µsec/div.



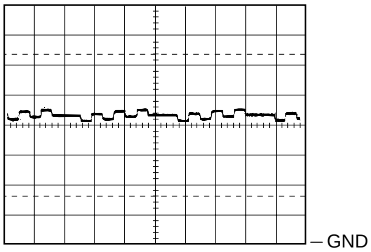
㉙ Foot of R5377 (Sharpness output Y)
V: 1V/div. H: 10µsec/div.



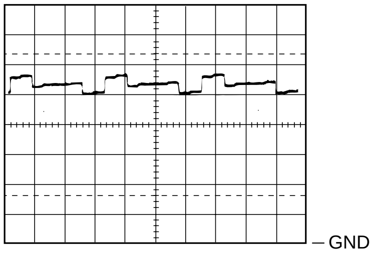
㉚ Q5333 Emitter (Y input)
V: 1V/div. H: 10µsec/div.



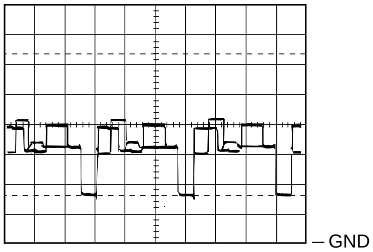
㉛ Q5255 Emitter (B-Y input)
V: 1V/div. H: 10µsec/div.



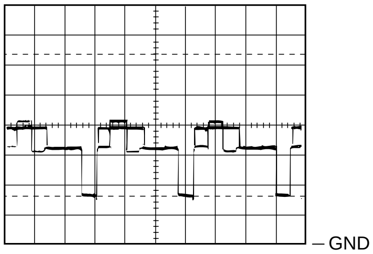
㉜ Q5254 Emitter (R-Y input)
V: 1V/div. H: 10µsec/div.



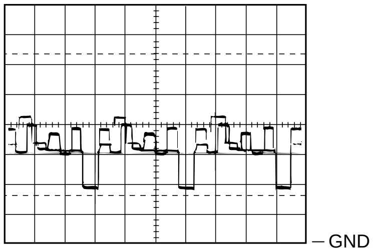
㉝ P5252 (R OUT)
V: 1V/div. H: 10µsec/div.



㉞ P5253 (G OUT)
V: 1V/div. H: 10µsec/div.



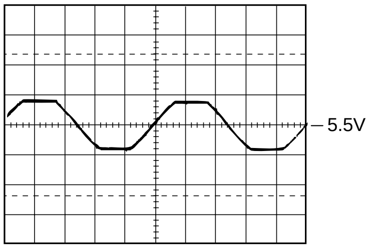
㉟ P5254 (B OUT)
V: 1V/div. H: 10µsec/div.



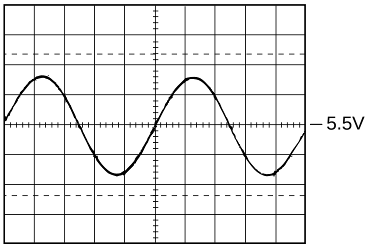
G AUDIO ASSY

Input signal
Video signal : EIA full color-bar , Picture quality : Standard
f = 1kHz , Vol. : MAX (Unless otherwise noted) Vin = 0.4rms
Range :DC range (Unless otherwise noted)

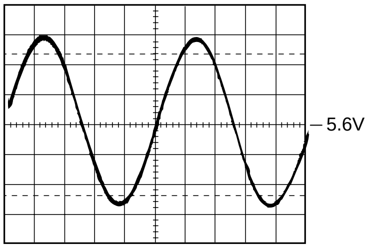
㊱-1 CN1201-pin 11
V: 5V/div. H: 0.2msec/div.



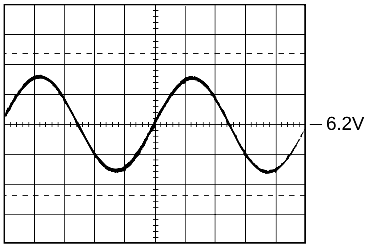
㊱-2 CN1201-pin 11
V: 2V/div. H: 0.2msec/div.
- Vol : 40



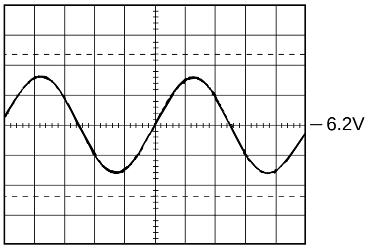
㊲ CN1201-pin 7
V: 0.2V/div. H: 0.2msec/div.



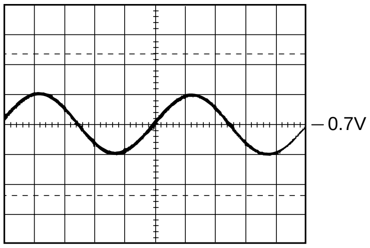
㊳ IC1201-pin 26
V: 0.2V/div. H: 0.2msec/div.



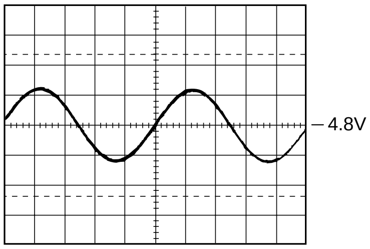
㊴ IC1201-pin 14, 17
V: 0.2V/div. H: 0.2msec/div.



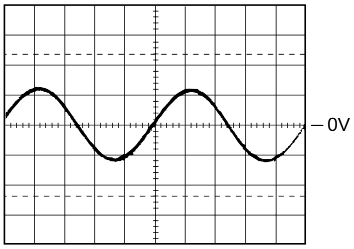
㊵ C1229 + (plus) side
V: 0.2V/div. H: 0.2msec/div.



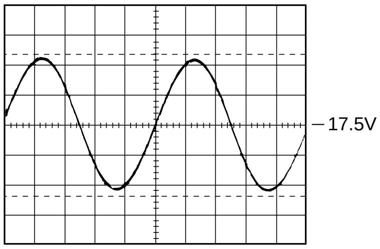
㊶ Q1201 Base
V: 0.2V/div. H: 0.2msec/div.



㊷ C1241 – (minus) side
V: 0.2V/div. H: 0.2msec/div.



㊸ CN1202-pin 7
V: 5V/div. H: 0.2msec/div.



IC1201 (UPC1853)

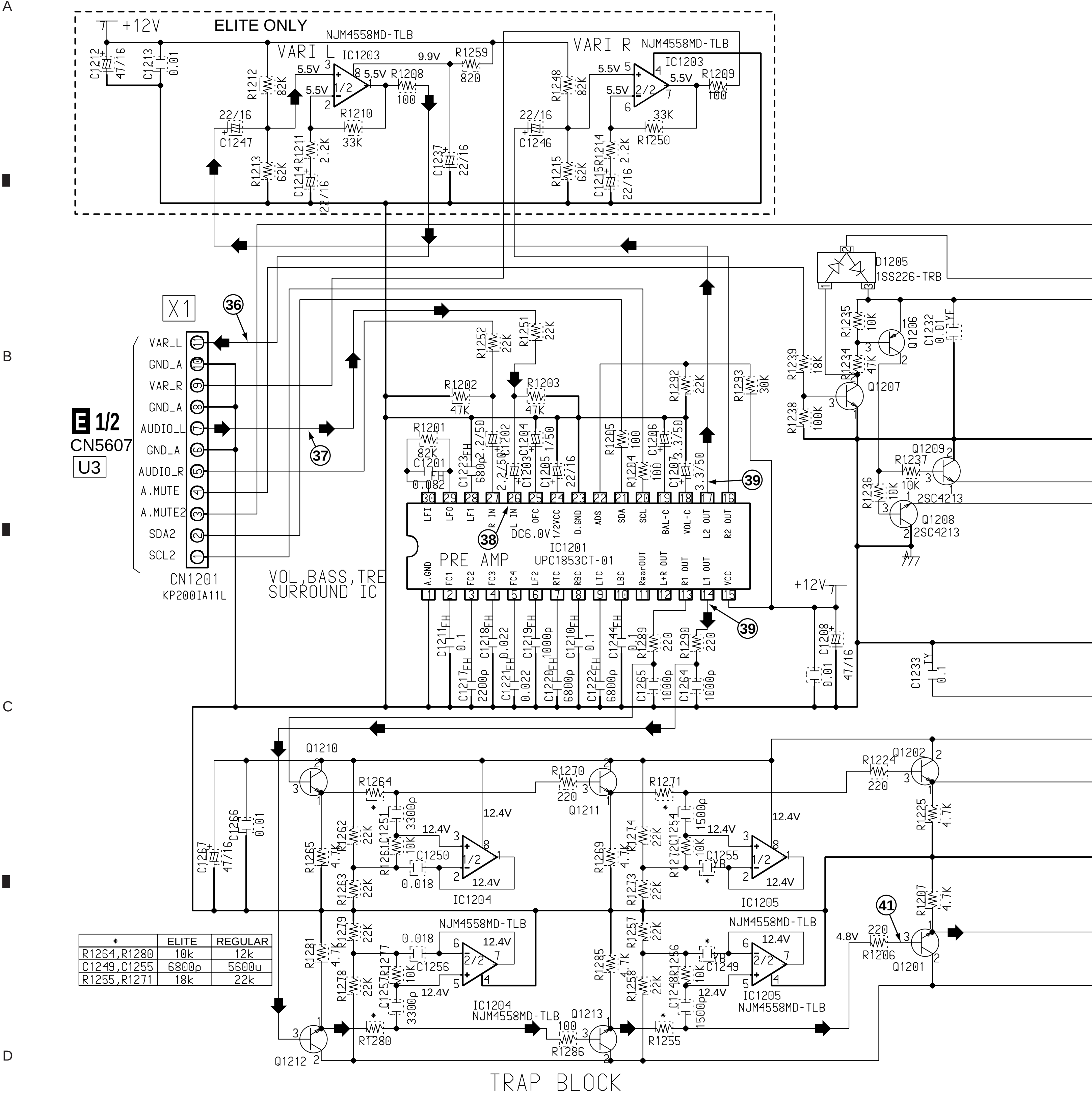
Pin No.	Voltage(V)	Pin No.	Voltage(V)
1	0	16	6.2
2	6.2	17	6.2
3	6.2	18	6.2
4	6.2	19	4.8
5	6.2	20	-
6	6.2	21	-
7	6.2	22	5.1
8	6.2	23	0
9	6.2	24	6.2
10	6.2	25	6.2
11	6.2	26	6.2
12	6.2	27	6.2
13	6.2	28	6.2
14	6.2	29	6.2
15	12.4	30	6.2

IC1202 (LA4280)

Pin No.	Voltage (V)
1	0.8
2	1.1
3	0.7
4	17.5
5	0
6	0.7
7	1.1
8	0.8
9	0
10	0
11	17.5
12	35.5
13	17.5
14	0

3.16 AUDIO ASSY

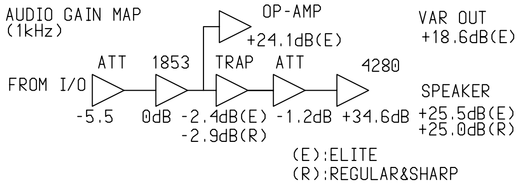
	SP MUTE ON	SP MUTE OFF
A.MUTE	HIGH	LOW

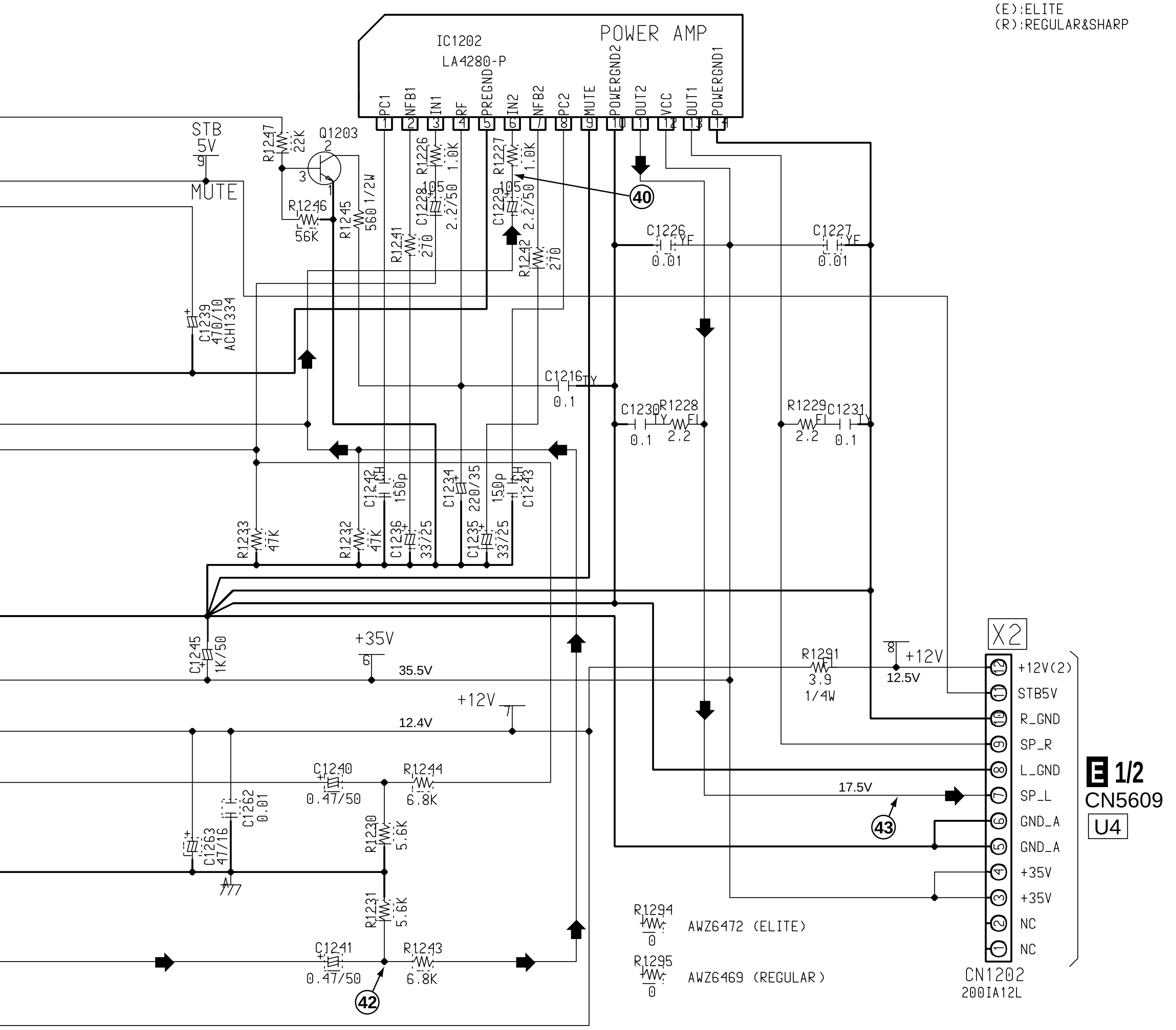

A
B
C
D
+12V
ELITE ONLY
NJM4558MD-TLB
VARI L
IC1203
VARI R
C1212 47/16
C1213 0.01
R1212 82K
R1213 62K
R1211 2.2K
R1210 33K
R1208 100
R1259 820
C1247 22/16
C1214 22/16
C1237 22/16
R1248 82K
R1215 62K
R1214 2.2K
R1250 33K
R1209 100
C1246 22/16
C1215 22/16
5.5V
9.9V
X1
36
37
38
39
41
E 1/2
CN5607
U3
VAR_L
GND_A
VAR_R
GND_A
AUDIO_L
GND_A
AUDIO_R
A.MUTE
A.MUTE2
SDA2
SCL2
CN1201
KP200IA11L
VOL,BASS,TRE
SURROUND IC
PRE AMP
IC1201
UPC1853CT-01
DC6.0V
R1201 82K
C1201 0.082
R1202 47K
R1203 47K
R1252 22K
R1251 22K
C1223 680p
C1202 2.2/50
C1204 2.2/50
C1203
C1205 1/50
22/16
R1205 100
R1204 100
C1206 3.3/50
C1207 3.3/50
R1292 22K
R1293 30K
LFI LFO LF1 R IN L IN OFC 1/2VCC D.GND ADS SDA SCL BAL-C VOL-C L2 OUT R2 OUT
A.GND FC1 FC2 FC3 FC4 LF2 RTC RBC LTC LBC RearOUT L+R OUT R1 OUT L1 OUT VCC
C1211 0.1
C1217 2200p
C1218 0.022
C1221 0.022
C1219 1000p
C1220 6800p
C1210 0.1
C1222 6800p
C1244 0.1
R1289 220
R1290 220
C1265 1000p
C1264 1000p
C1208 0.01
47/16
C1233 0.1
D1205
1SS226-TRB
R1235 10K
R1234 47K
Q1206
C1232 0.01
R1239 18K
R1238 100K
Q1207
Q1209
R1237 10K
R1236 10K
2SC4213
Q1208
2SC4213
Q1210
R1264
C1251 3300p
R1261 10K
C1250 0.018
R1262 22K
R1265 4.7K
R1263 22K
C1266 0.01
C1267 47/16
12.4V
IC1204
R1270 220
Q1211
R1271
C1254 1500p
R1272 10K
C1255
R1274 22K
R1269 4.7K
R1273 22K
IC1205
R1224 220
Q1202
R1225 4.7K
R1207 4.7K
220
R1206
Q1201
4.8V
NJM4558MD-TLB
C1256 0.018
R1277 10K
C1257 3300p
R1279 22K
R1281 4.7K
R1278 22K
R1280
Q1212
IC1204
NJM4558MD-TLB
Q1213
R1286 100
R1256 10K
C1248 1500p
C1249
R1257 22K
R1285 4.7K
R1258 22K
R1255
IC1205
NJM4558MD-TLB
TRAP BLOCK

*	ELITE	REGULAR
R1264,R1280	10k	12k
C1249,C1255	6800p	5600u
R1255,R1271	18k	22k

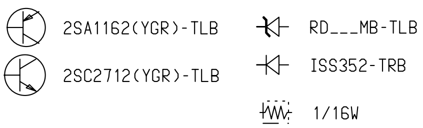
G AUDIO ASSY
(AWZ6472 : ELITE)
(AWZ6469 : REGULAR)

➡ : AUDIO SIGNAL ROUTE

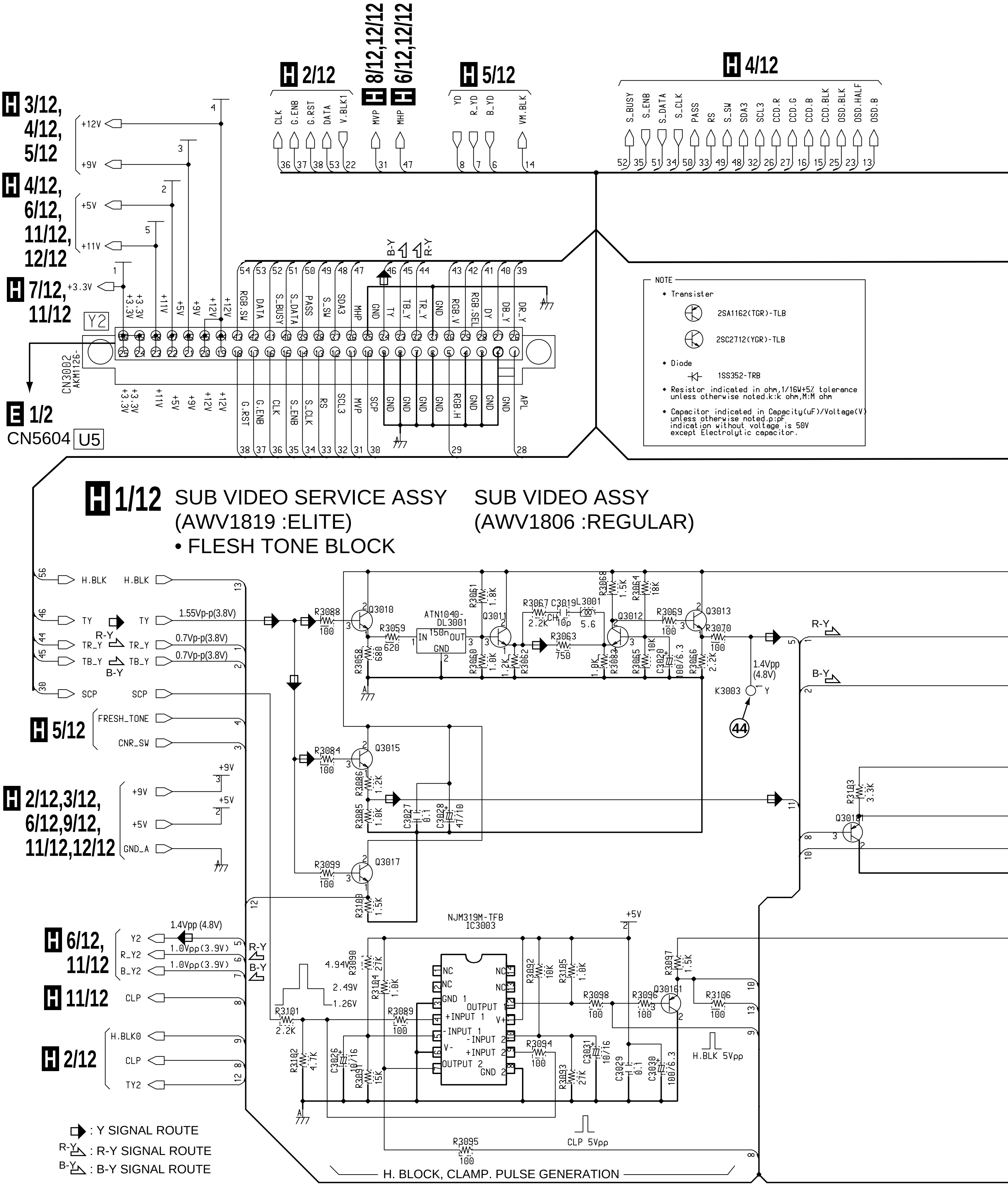

AUDIO GAIN MAP
(1kHz)
OP-AMP
+24.1dB(E)
VAR OUT
+18.6dB(E)
ATT
1853
TRAP
ATT
4280
FROM I/O
SPEAKER
-5.5
0dB
-2.4dB(E)
-2.9dB(R)
-1.2dB
+34.6dB
+25.5dB(E)
+25.0dB(R)
(E):ELITE
(R):REGULAR&SHARP

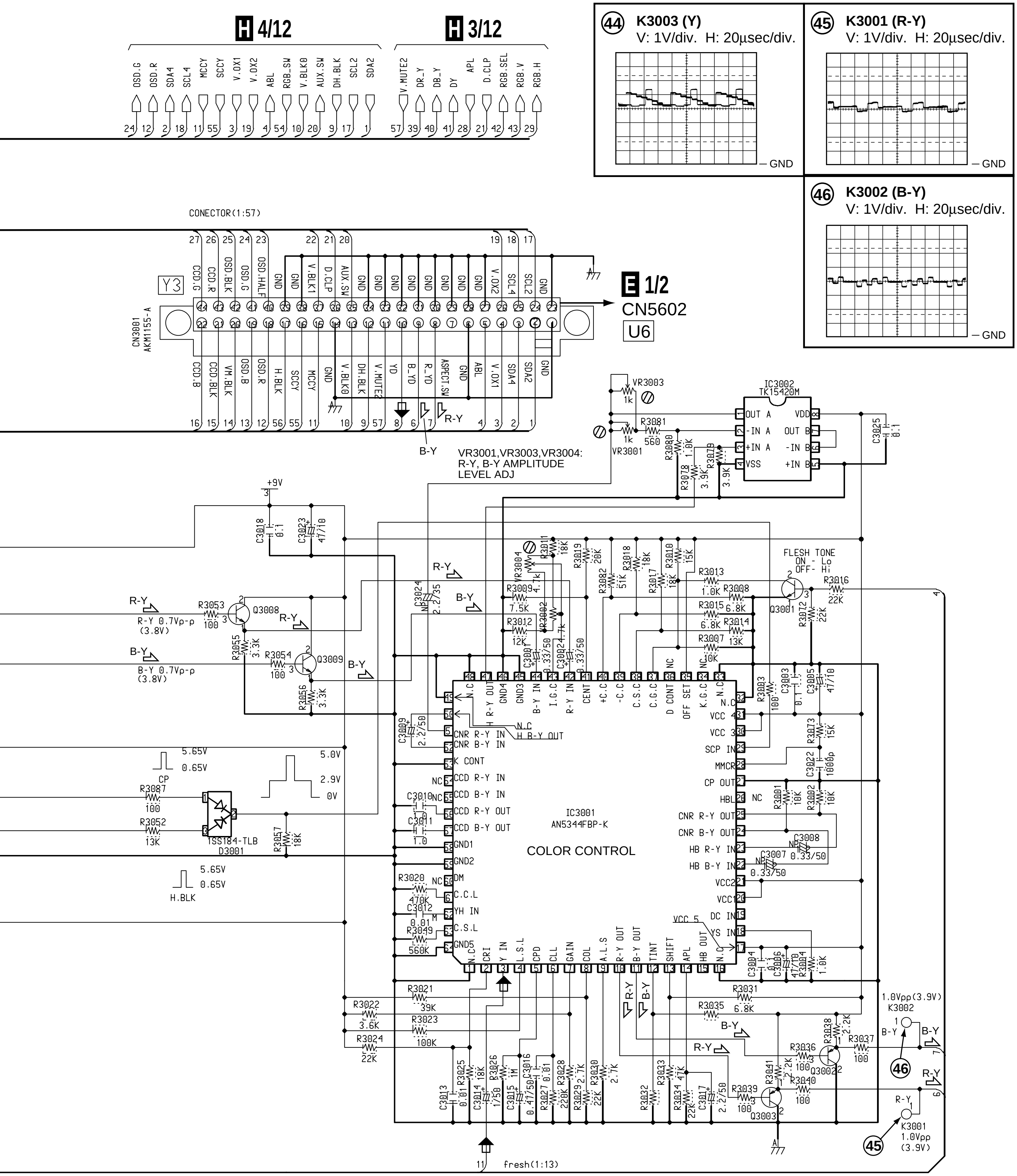

IC1202
LA4280-P
POWER AMP
PC1 1
NFB1 2
IN1 3
RF 4
PREGND 5
IN2 6
NFB2 7
PC2 8
MUTE 9
POWERGND2 10
OUT2 11
VCC 12
OUT1 13
POWERGND1 14
STB 5V 9
MUTE
R1247 22K
Q1203
R1246 56K
R1245 560 1/2W
R1226 1.0K
C1228 105 2.2/50
R1241 270
R1227 1.0K
C1229 105 2.2/50
R1242 270
40
C1226 YF 0.01
C1227 YF 0.01
C1239 470/10 ACH1334
C1216 TY 0.1
C1230 TY 0.1
R1228 FL 2.2
R1229 FL 2.2
C1231 TY 0.1
C1242 CH 150p
C1234 220/35
C1243 CH 150p
R1233 47K
R1232 47K
C1236 33/25
C1235 33/25
C1245 1K/50
+35V 6
35.5V
+12V 7
12.4V
R1291 3.9 1/4W
+12V 8
12.5V
X2
C1240 0.47/50
R1244 6.8K
C1262 0.01
C1263 47/16
R1230 5.6K
R1231 5.6K
C1241 0.47/50
R1243 6.8K
42
17.5V
43
12 +12V(2)
11 STB5V
10 R_GND
9 SP_R
8 L_GND
7 SP_L
6 GND_A
5 GND_A
4 +35V
3 +35V
2 NC
1 NC
CN1202
200IA12L
E 1/2
CN5609
U4
R1294 0 AWZ6472 (ELITE)
R1295 0 AWZ6469 (REGULAR)

Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k Ω
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless
otherwise noted p pF
Indication without voltage is 50V
except electrolytic capacitor.


2SA1162(YGR)-TLB
2SC2712(YGR)-TLB
RD___MB-TLB
ISS352-TRB
1/16W

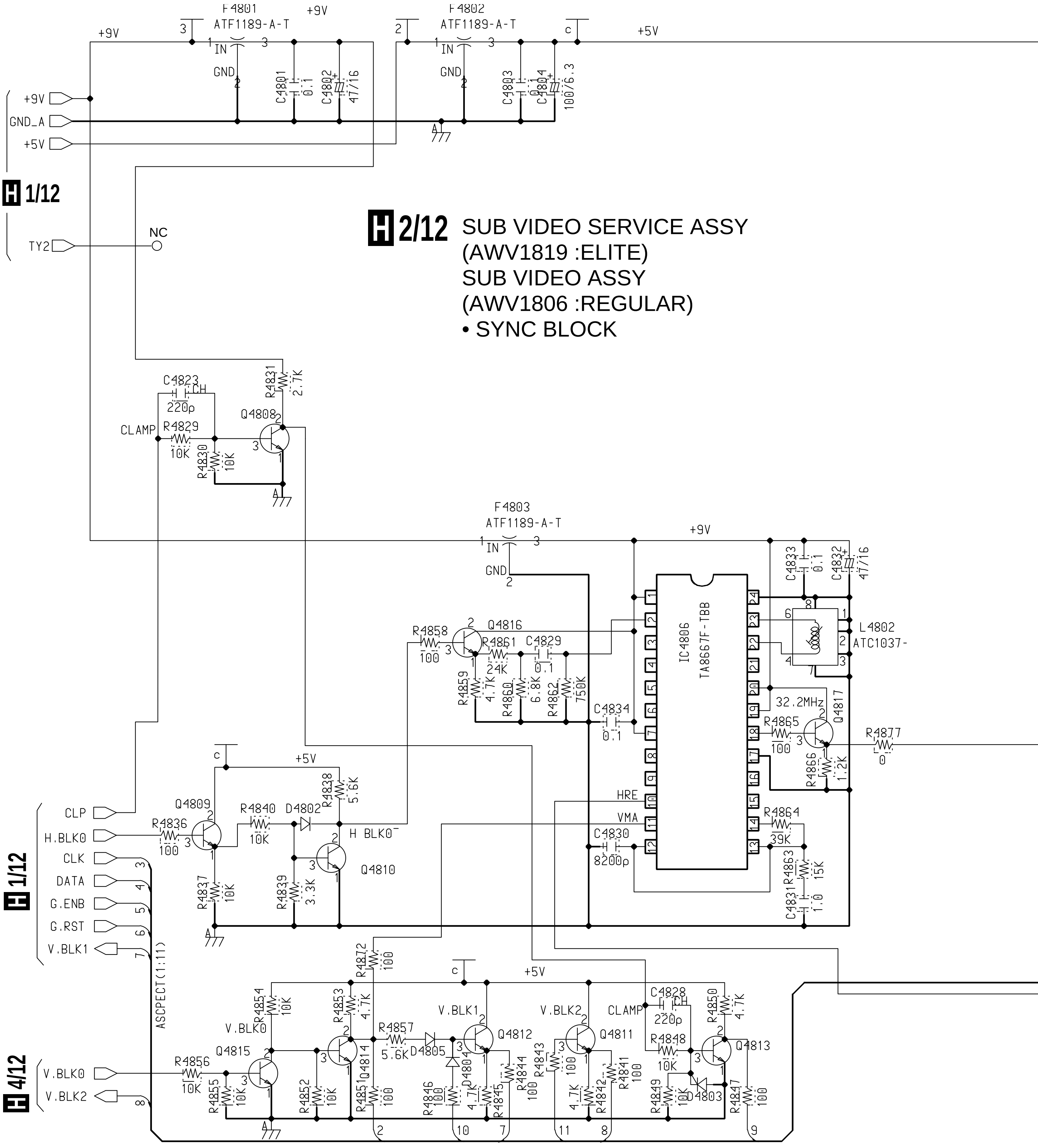
3.17 SUB VIDEO SERVICE and SUB VIDEO ASSYS (1/12)


H 3/12, 4/12, 5/12
H 4/12, 6/12, 11/12, 12/12
H 7/12, 11/12
+12V
+9V
+5V
+11V
+3.3V
H 2/12
CLK
G.ENB
G.RST
DATA
V.BLK1
H 8/12,12/12
MVP
H 6/12,12/12
MHP
H 5/12
YD
R_YD
B_YD
VM.BLK
H 4/12
S_BUSY
S_ENB
S_DATA
S_CLK
PASS
RS
S_SW
SDA3
SCL3
CCD.R
CCD.G
CCD.B
CCD.BLK
OSD.BLK
OSD.HALF
OSD.B
Y2
CN3002
AKM1126-
E 1/2
CN5604
U5
B-Y
R-Y
RGB.SW
RGB.V
RGB.SEL
RGB.H
DY
DB_Y
DR_Y
TY
TB_Y
TR_Y
GND
SCP
APL
NOTE
• Transister
2SA1162(TGR)-TLB
2SC2712(YGR)-TLB
• Diode
1SS352-TRB
• Resistor indicated in ohm,1/16W±5% tolerance unless otherwise noted.k:k ohm,M:M ohm
• Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.
H 1/12
SUB VIDEO SERVICE ASSY
(AWV1819 :ELITE)
• FLESH TONE BLOCK
SUB VIDEO ASSY
(AWV1806 :REGULAR)
H.BLK
1.55Vp-p(3.8V)
0.7Vp-p(3.8V)
H 5/12
FRESH_TONE
CNR_SW
H 2/12,3/12, 6/12,9/12, 11/12,12/12
GND_A
ATN1040-
DL3001
Q3010
Q3011
Q3012
Q3013
Q3015
Q3017
Q3018
Q3016
1.4Vpp
(4.8V)
K3003
44
H 6/12, 11/12
R_Y2
B_Y2
1.4Vpp (4.8V)
1.0Vpp(3.9V)
H 11/12
CLP
H 2/12
H.BLK0
TY2
NJM319M-TFB
IC3003
4.94V
2.49V
1.26V
H.BLK 5Vpp
CLP 5Vpp
H. BLOCK, CLAMP. PULSE GENERATION
: Y SIGNAL ROUTE
: R-Y SIGNAL ROUTE
: B-Y SIGNAL ROUTE



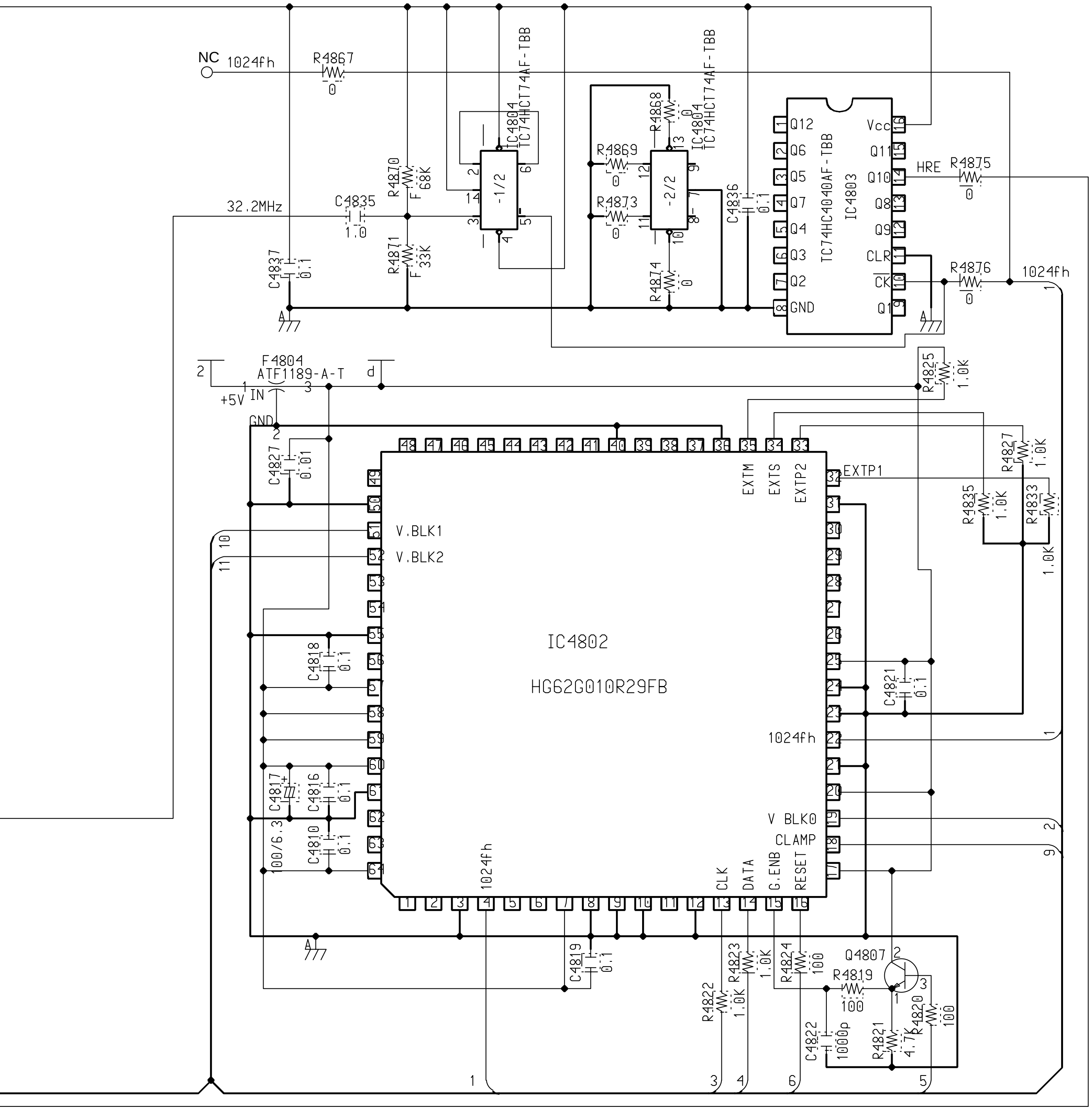
H 4/12
H 3/12
OSD.G
OSD.R
SDA4
SCL4
MCCY
SCCY
V.OX1
V.OX2
ABL
RGB.SW
V.BLKO
AUX.SW
DH.BLK
SCL2
SDA2
V.MUTE2
DR_Y
DB_Y
DY
APL
D.CLP
RGB.SEL
RGB.V
RGB.H
44 K3003 (Y) V: 1V/div. H: 20µsec/div.
45 K3001 (R-Y) V: 1V/div. H: 20µsec/div.
46 K3002 (B-Y) V: 1V/div. H: 20µsec/div.
GND
CONECTOR(1:57)
CN3001 AKM1155-A
Y3
E 1/2
CN5602
U6
CCD.G
CCD.R
OSD.BLK
OSD.HALF
V.BLK1
D.CLP
AUX.SW
CCD.B
CCD.BLK
VM.BLK
OSD.B
H.BLK
YD
B_YD
R_YD
ASPECT.SW
R-Y
B-Y
VR3003 1k
VR3001 1k
R3081 560
IC3002 TK15420M
OUT A
-IN A
+IN A
VSS
VDD
OUT B
-IN B
+IN B
C3025 0.1
VR3001,VR3003,VR3004: R-Y, B-Y AMPLITUDE LEVEL ADJ
R3080 1.0K
R3079 3.9K
R3078 3.9K
+9V
C3018 0.1
C3023 47/10
R3053 100
Q3008
R-Y 0.7Vp-p (3.8V)
B-Y 0.7Vp-p (3.8V)
R3055 3.3K
R3054 100
Q3009
R3056 3.3K
C3024 2.2/35
VR3004 4.7k
R3011 18K
R3019 20K
R3082 51K
R3018 18K
R3017 18K
R3010 15K
R3013 1.0K
R3008 6.8K
FLESH TONE ON - Lo OFF - Hi
Q3001
R3016 22K
R3072 22K
R3009 7.5K
VR3002 4.7k
R3015 6.8K
R3014 13K
R3012 12K
R3007 10K
C3001 0.33/50
C3002 0.33/50
R3003 100
C3003 0.1
C3005 47/10
R3073 15K
C3022 1000p
R3001 10K
R3002 10K
C3008 0.33/50
C3007 0.33/50
C3009 2.2/50
C3010
C3011 1.0
R3020 470K
C3012 0.01
R3049 560K
5.65V
0.65V
CP
R3087 100
R3052 13K
TSS184-TLB D3001
5.0V
2.9V
0V
R3057 18K
H.BLK
IC3001 AN5344FBP-K
COLOR CONTROL
N.C
R-Y OUT
GND4
GND3
B-Y IN
I.G.C
R-Y IN
CENT
+C.C
-C.C
C.S.C
C.G.C
D CONT
OFF SET
K.G.C
CNR R-Y IN
CNR B-Y IN
H B-Y OUT
K CONT
CCD R-Y IN
CCD B-Y IN
CCD R-Y OUT
CCD B-Y OUT
GND1
GND2
DM
C.C.L
YH IN
C.S.L
GND5
VCC 4
VCC 3
SCP IN
MMCR
CP OUT
HBL
CNR R-Y OUT
CNR B-Y OUT
HB R-Y IN
HB B-Y IN
VCC2
VCC1
DC IN
YS IN
VCC 5
CRI
Y IN
L.S.L
CPD
CLL
GAIN
COL
A.L.S
B-Y OUT
TINT
SHIFT
APL
HB OUT
C3004 0.1
C3006 47/10
R3004 1.0K
R3021 39K
R3022 3.6K
R3023 100K
R3024 22K
R3031 6.8K
R3035
1.0Vpp(3.9V) K3002
R3038 2.2K
R3037 100
R3036 100
Q3002
R3041 2.2K
R3040 100
R3039 100
Q3003
K3001 1.0Vpp (3.9V)
C3013 0.01
R3025 18K
C3014 1/50
R3026 1M
C3015 0.47/50
C3016 0.01
R3027 220K
R3028 2.7K
R3029 22K
R3030 2.7K
R3032
R3033 47K
R3034 22K
C3017 2.2/50
fresh(1:13)

3.18 SUB VIDEO SERVICE and SUB VIDEO ASSYS (2/12)



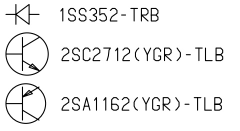
H 2/12 SUB VIDEO SERVICE ASSY
(AWV1819 :ELITE)
SUB VIDEO ASSY
(AWV1806 :REGULAR)
• SYNC BLOCK

1
2
3
4
A
B
C
D
F4801
ATF1189-A-T
+9V
+9V
3
1
IN
3
GND
2
C4801
0.1
C4802
47/16
F4802
ATF1189-A-T
2
1
IN
3
GND
2
C4803
0.1
C4804
100/6.3
c
+5V
+9V
GND_A
+5V
A
H 1/12
TY2
NC
C4823
CH
220p
R4831
2.7K
CLAMP
R4829
10K
Q4808
2
3
1
R4830
10K
A
F4803
ATF1189-A-T
1
IN
3
GND
2
+9V
C4833
0.1
C4832
47/16
IC4806
TA8667F-TBB
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
6
8
1
L4802
ATC1037-
2
4
7
3
R4858
100
2
Q4816
3
1
R4861
24K
C4829
0.1
R4859
4.7K
R4860
6.8K
R4862
750K
C4834
0.1
32.2MHz
R4865
100
Q4817
2
3
1
R4877
0
R4866
1.2K
HRE
VMA
C4830
8200p
R4864
39K
R4863
15K
C4831
1.0
c
+5V
R4838
5.6K
Q4809
2
R4840
10K
D4802
R4836
100
3
1
H BLKO
2
3
1
Q4810
R4837
10K
R4839
3.3K
A
H 1/12
CLP
H.BLK0
CLK
DATA
G.ENB
G.RST
V.BLK1
3
4
5
6
7
ASPECT(1:11)
R4872
100
c
+5V
R4854
10K
R4853
4.7K
V.BLK1
V.BLK2
CLAMP
C4828
CH
220p
R4850
4.7K
V.BLK0
R4857
5.6K
2
Q4812
2
Q4811
R4848
10K
2
Q4813
Q4815
2
3
1
Q4814
D4805
3
1
3
1
3
1
D4804
R4844
R4843
100
R4841
100
D4803
H 4/12
V.BLK0
V.BLK2
R4856
10K
3
1
R4855
10K
R4852
10K
R4851
100
R4846
100
4.7K
R4845
100
4.7K
R4842
R4849
10K
R4847
100
8
A
2
10
7
11
8
9


NC
1024fh
R4867
0
32.2MHz
C4835
1.0
C4837
0.1
R4870
F 68K
R4871
F 33K
IC4804
TC74HCT74AF-TBB
-1/2
-2/2
R4868
0
R4869
0
R4873
0
R4874
0
C4836
0.1
IC4803
TC74HC4040AF-TBB
Q12
Q6
Q5
Q7
Q4
Q3
Q2
GND
Vcc
Q11
Q10
Q8
Q9
CLR
CK
Q1
HRE
R4875
0
R4876
0
1024fh
F4804
ATF1189-A-T
+5V
IN
GND
R4825
1.0K
R4827
1.0K
R4835
1.0K
R4833
1.0K
C4827
0.01
IC4802
HG62G010R29FB
V.BLK1
V.BLK2
EXTM
EXTS
EXTP2
EXTP1
1024fh
V BLK0
CLAMP
RESET
G.ENB
DATA
CLK
C4818
0.1
C4817
100/6.3
C4816
0.1
C4810
0.1
C4821
0.1
C4819
0.1
R4822
1.0K
R4823
1.0K
R4824
100
R4819
100
Q4807
R4820
100
R4821
4.7K
C4822
1000p

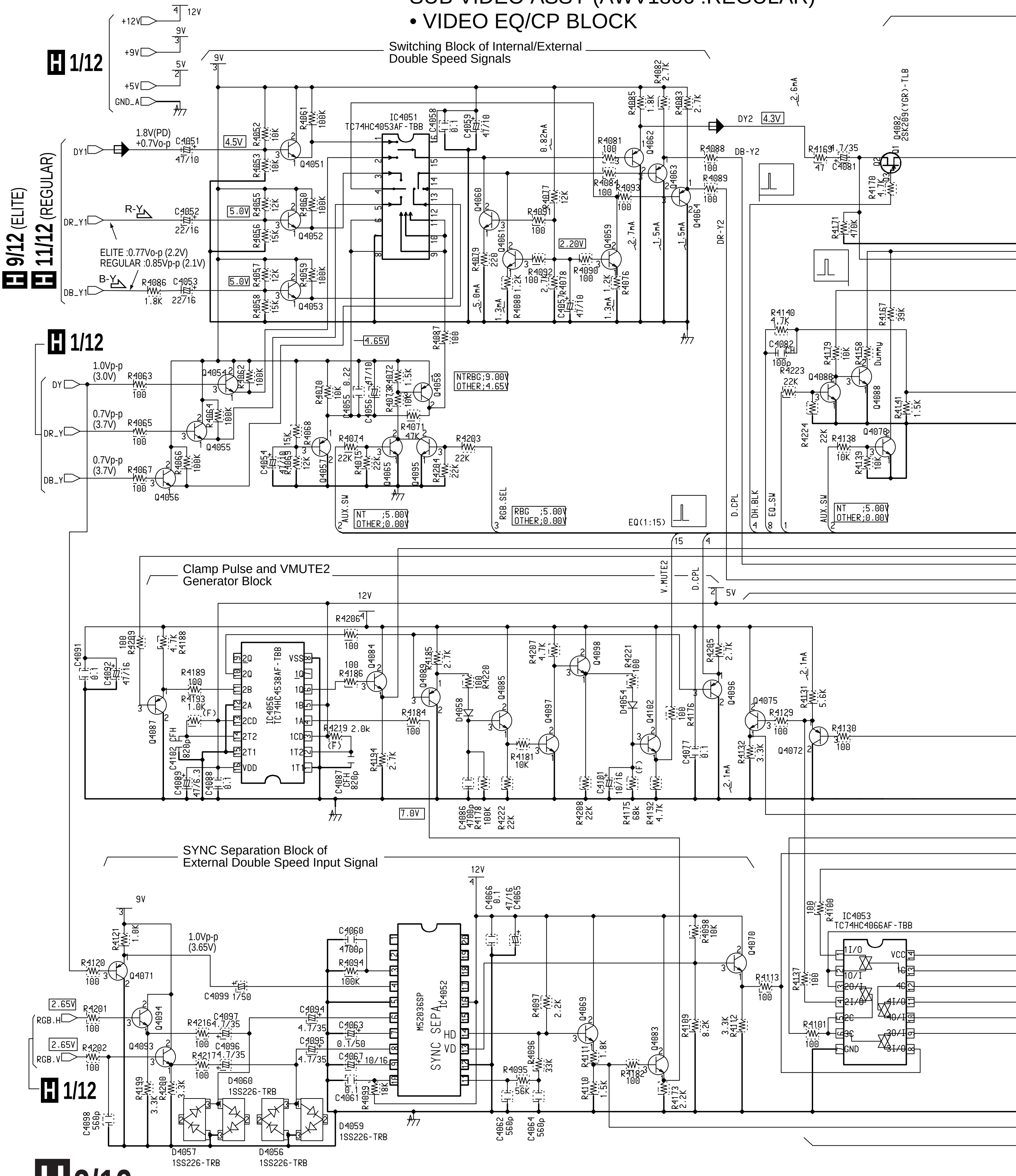
* Resistor indicated in ohm,1/16W+5% tolerance
unless otherwise noted.k:k ohm,M:M ohm

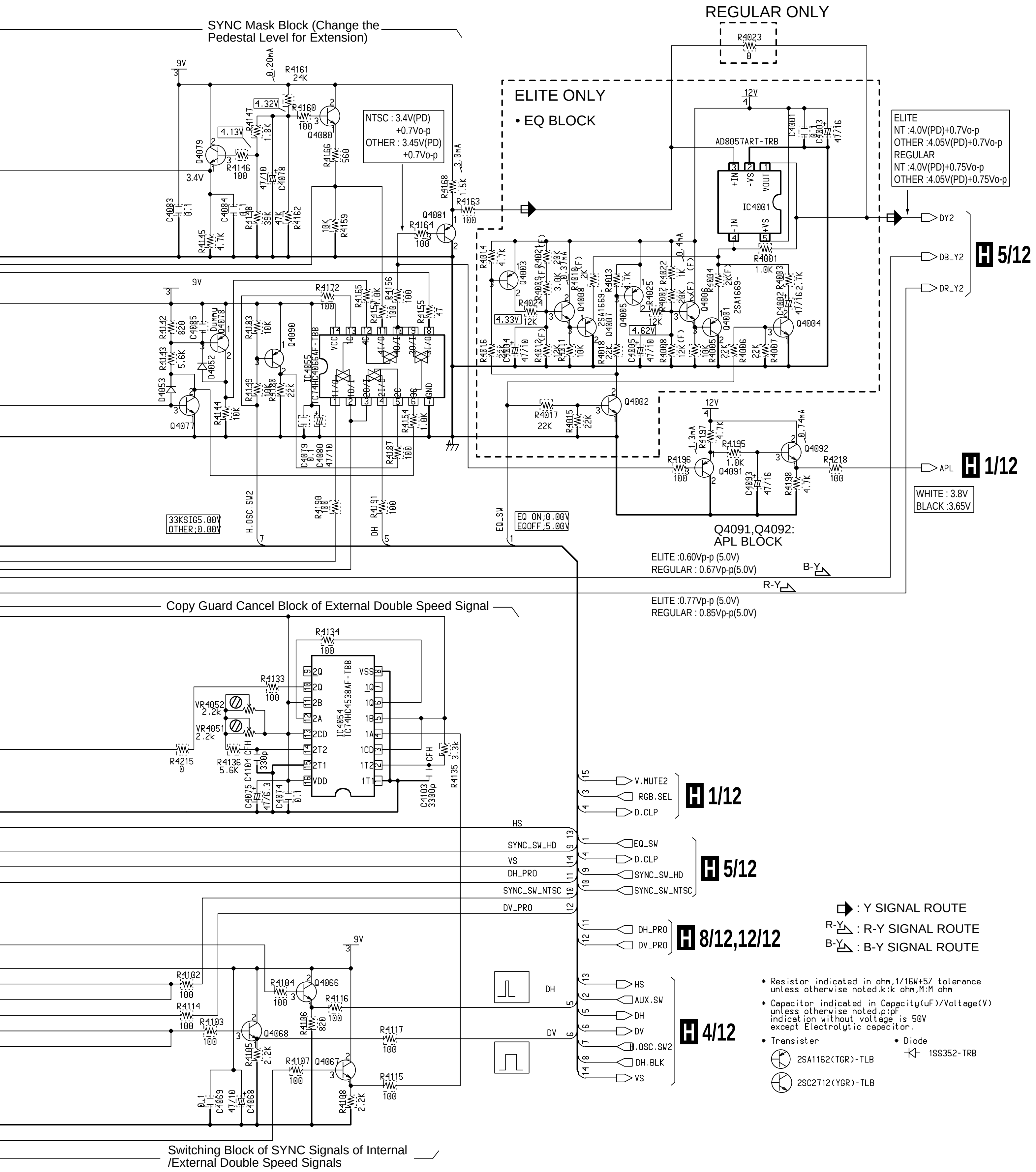
* Capacitor indicated in Capacity(uF)/Voltage(V)
unless otherwise noted.p:pF
indication without voltage is 50V
except Electrolytic capacitor.


1SS352-TRB
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB

3.19 SUB VIDEO SERVICE and SUB VIDEO ASSYS (3/12)

H 3/12 SUB VIDEO SERVICE ASSY (AWV1819 :ELITE)
SUB VIDEO ASSY (AWV1806 :REGULAR)
• VIDEO EQ/CP BLOCK


H 1/12
+12V
+9V
+5V
GND_A
12V
9V
5V
Switching Block of Internal/External
Double Speed Signals
H 9/12 (ELITE)
H 11/12 (REGULAR)
DY1
DR_Y1
DB_Y1
1.8V(PD)
+0.7Vo-p
R-Y
B-Y
ELITE :0.77Vo-p (2.2V)
REGULAR :0.85Vp-p (2.1V)
4.5V
5.0V
IC4051
TC74HC4053AF-TBB
Q4051
Q4052
Q4053
Q4060
Q4061
Q4062
Q4063
Q4064
Q4059
DY2
4.3V
DB-Y2
DR-Y2
2.6mA
0.82mA
2.20V
2.7mA
1.5mA
5.0mA
1.3mA
Q4082
2SK209(YGR)-TLB
4.65V
NTRBG;9.00V
OTHER;4.65V
1.0Vp-p
(3.0V)
0.7Vp-p
(3.7V)
DY
DR_Y
DB_Y
Q4054
Q4055
Q4056
Q4057
Q4058
Q4065
Q4095
AUX.SW
NT ;5.00V
OTHER;0.00V
RGB.SEL
RBG ;5.00V
OTHER;0.00V
EQ(1:15)
D.CPL
DH.BLK
EQ_SW
Q4088
Q4076
Q4086
Clamp Pulse and VMUTE2
Generator Block
V.MUTE2
D.CPL
IC4056
TC74HC4538AF-TBB
Q4087
Q4084
Q4089
Q4085
Q4097
Q4098
Q4102
Q4096
Q4075
Q4072
D4058
D4054
7.0V
2.1mA
SYNC Separation Block of
External Double Speed Input Signal
1.0Vp-p
(3.65V)
Q4071
Q4094
Q4093
RGB.H
RGB.V
2.65V
H 1/12
IC4052
M52036SP
SYNC SEPA
HD
VD
Q4069
Q4070
Q4083
D4057
1SS226-TRB
D4056
1SS226-TRB
D4060
1SS226-TRB
D4059
1SS226-TRB
IC4053
TC74HC4066AF-TBB
1I/O
1O/I
2O/I
2I/O
2C
3C
GND
VCC
1C
4C
4I/O
4O/I
3O/I
3I/O
A
B
C
D
1
2
3
4


SYNC Mask Block (Change the Pedestal Level for Extension)
REGULAR ONLY
R4023 0
ELITE ONLY
• EQ BLOCK
12V
AD8057ART-TRB
IC4001
+IN
-VS
VOUT
-IN
+VS
C4001 0.1
C4003 47/16
R4001 1.0K
ELITE
NT :4.0V(PD)+0.7Vo-p
OTHER :4.05V(PD)+0.7Vo-p
REGULAR
NT :4.0V(PD)+0.75Vo-p
OTHER :4.05V(PD)+0.75Vo-p
DY2
DB_Y2
DR_Y2
H 5/12
NTSC : 3.4V(PD) +0.7Vo-p
OTHER : 3.45V(PD) +0.7Vo-p
9V
0.20mA
R4161 24K
4.32V
R4160 100
Q4080
4.13V
R4147 1.8K
Q4079
R4146 100
3.4V
R4166 560
3.0mA
R4168 1.5K
R4163 100
Q4081
R4164 100
C4083 0.1
C4084 0.1
R4145 4.7K
R4148 39K
47/10 C4078
R4162 47K
R4159 10K
R4014 4.7K
Q4003
R4021 20K
0.37mA
R4009 3.0K
R4024 12K
Q4008
R4010 2K
4.33V
R4013 4.7K
Q4005
2SA1669
Q4007
R4025 12K
4.62V
R4022 1K
0.4mA
R4002 20K
Q4006
R4004 2K
Q4001
2SA1669
R4003 2.7K
C4002 47/16
Q4004
R4016 22K
C4004 47/10
R4012 12K
R4011 10K
R4018 22K
C4005 47/10
R4008 12K
R4005 10K
R4006 22K
R4007 22K
Q4002
R4017 22K
R4015 22K
12V
1.3mA
R4197 4.7K
0.74mA
R4195 1.0K
Q4092
R4196 100
Q4091
C4093 47/16
R4198 4.7K
R4218 100
APL
H 1/12
WHITE : 3.8V
BLACK :3.65V
Q4091,Q4092: APL BLOCK
ELITE :0.60Vp-p (5.0V)
REGULAR : 0.67Vp-p(5.0V)
B-Y
R-Y
ELITE :0.77Vp-p (5.0V)
REGULAR : 0.85Vp-p(5.0V)
9V
R4142 820
C4085 0.1
Dummy Q4078
R4143 5.6K
D4052
D4053
Q4077
R4144 10K
R4172 100
R4183 10K
Q4090
R4149 10K
R4180 22K
R4165 10K
R4157 100
R4156 100
R4155 47
IC4055 TC74HC4066AF-TBB
VCC
1I/O
1O/I
2O/I
2I/O
4I/O
4O/I
3O/I
3I/O
4C
1C
2C
3C
GND
C4079 0.1
C4080 47/10
R4154 1.0K
R4187 100
33KSIG5.00V
OTHER;0.00V
H.OSC.SW2
R4190 100
R4191 100
DH
EQ_SW
EQ ON;0.00V
EQOFF;5.00V
Copy Guard Cancel Block of External Double Speed Signal
R4134 100
R4133 100
VR4052 2.2k
VR4051 2.2k
R4215 0
R4136 5.6K
C4104 330p CFH
C4075 47/6.3
C4074 0.1
IC4054 TC74HC4538AF-TBB
2Q
2Q
2B
2A
2CD
2T2
2T1
VDD
VSS
1Q
1Q
1B
1A
1CD
1T2
1T1
CFH
R4135 3.3k
C4103 3300p
V.MUTE2
RGB.SEL
D.CLP
H 1/12
HS
SYNC_SW_HD
VS
DH_PRO
SYNC_SW_NTSC
DV_PRO
EQ_SW
D.CLP
SYNC_SW_HD
SYNC_SW_NTSC
H 5/12
DH_PRO
DV_PRO
H 8/12,12/12
9V
R4102 100
R4104 100
Q4066
R4116 100
R4114 100
R4103 100
Q4068
R4106 820
R4117 100
R4105 2.2K
R4107 100
Q4067
R4115 100
C4069 0.1
C4068 47/10
R4108 2.2K
DH
DV
HS
AUX.SW
DH
DV
H.OSC.SW2
DH.BLK
VS
H 4/12
Switching Block of SYNC Signals of Internal /External Double Speed Signals

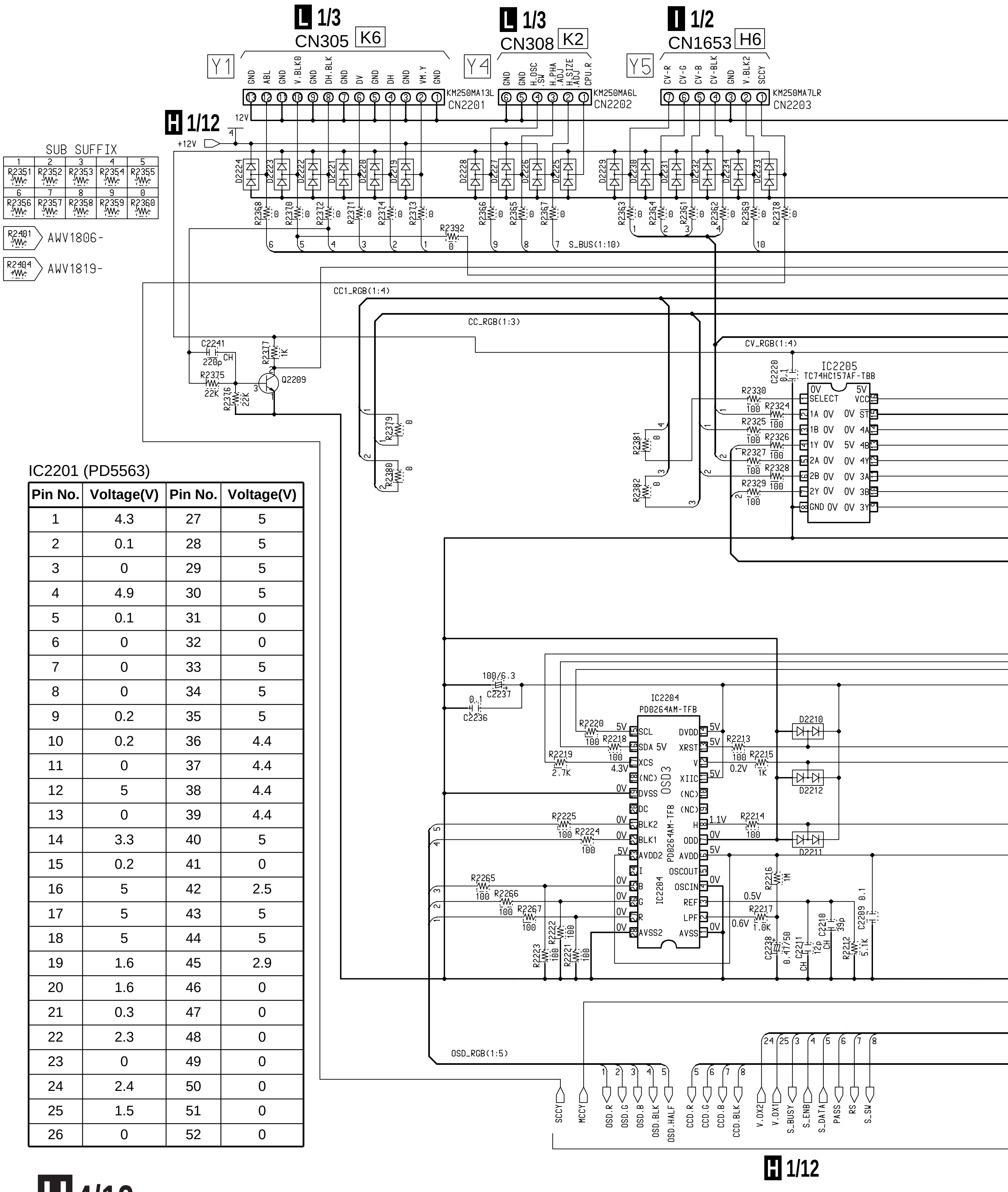
: Y SIGNAL ROUTE

R-Y : R-Y SIGNAL ROUTE

B-Y : B-Y SIGNAL ROUTE

- Resistor indicated in ohm,1/16W+5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.
- Transister
  - 2SA1162(TGR)-TLB
  - 2SC2712(YGR)-TLB
- Diode
  - 1SS352-TRB

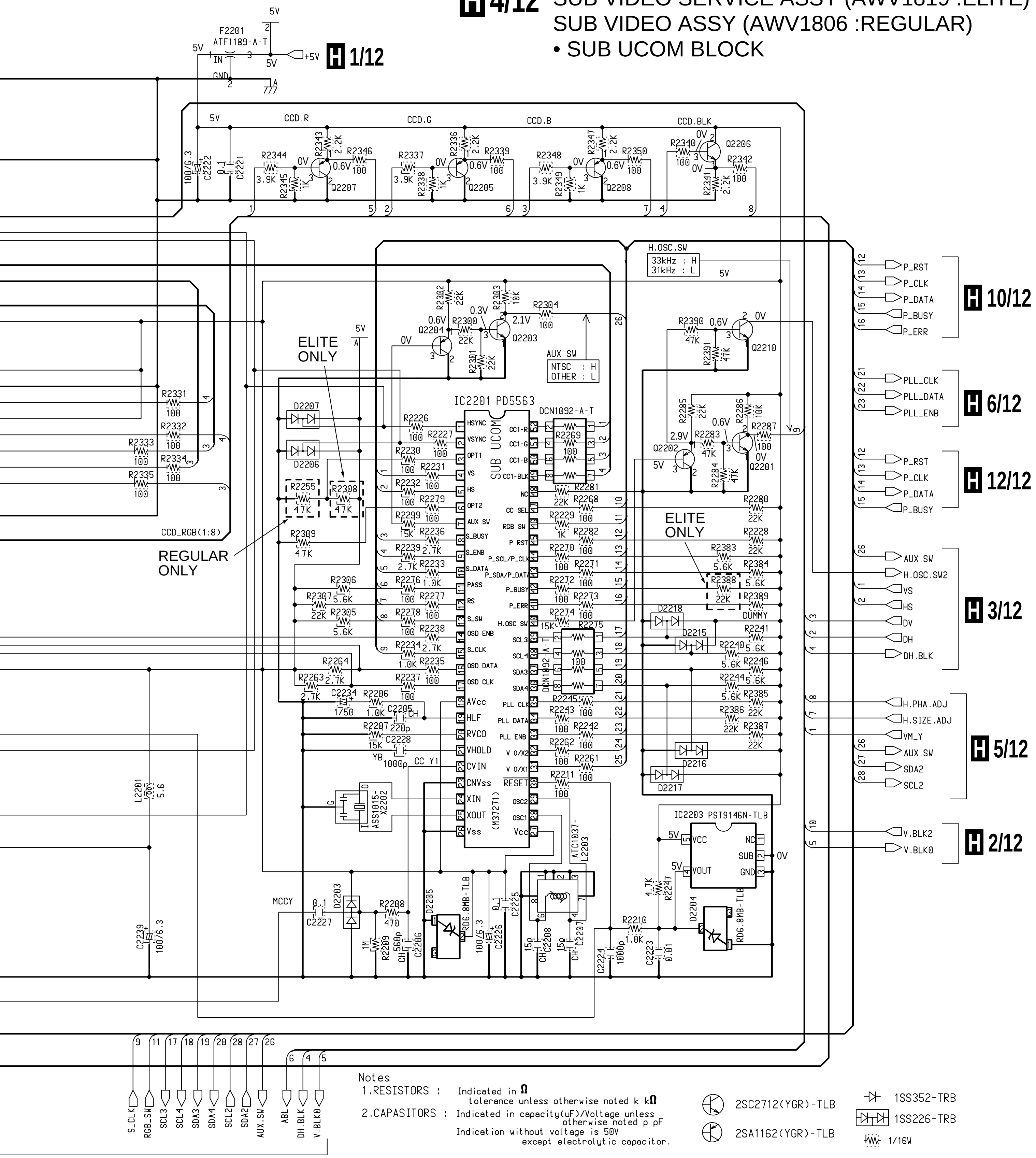
3.20 SUB VIDEO SERVICE and SUB VIDEO ASSYS (4/12)


L 1/3
CN305 K6
Y1
GND ABL GND V.BLK0 GND DH.BLK GND DV GND DH GND VM.Y GND
KM250MA13L
CN2201
L 1/3
CN308 K2
Y4
GND GND H.OSC .SW H.PHA ADJ H.SIZE ADJ CPU.R
KM250MA6L
CN2202
I 1/2
CN1653 H6
Y5
CV-R CV-G CV-B CV-BLK GND V.BLK2 SCCY
KM250MA7LR
CN2203
H 1/12
12V
+12V
SUB SUFFIX
R2351 R2352 R2353 R2354 R2355
R2356 R2357 R2358 R2359 R2360
R2401 AWV1806-
R2404 AWV1819-
D2224 D2223 D2222 D2221 D2220 D2219 D2218
D2228 D2227 D2226 D2225
D2229 D2230 D2231 D2232 D2234 D2233
R2368 R2370 R2372 R2371 R2374 R2373
R2366 R2365 R2367
R2363 R2364 R2361 R2362 R2369 R2378
R2392
S_BUS(1:10)
CC1_RGB(1:4)
CC_RGB(1:3)
CV_RGB(1:4)
C2241 220p CH
R2377 1K
R2375 22K
R2376 22K
Q2209
R2379 R2380 R2381 R2382
IC2205
TC74HC157AF-TBB
C2220 0.1
R2330 R2324 R2325 R2326 R2327 R2328 R2329
SELECT 1A 1B 1Y 2A 2B 2Y GND VCC ST 4A 4B 4Y 3A 3B 3Y
100/6.3 C2237
0.1 C2236
IC2204
PD0264AM-TFB
OSD3
SCL SDA XCS (NC) DVSS DC BLK2 BLK1 AVDD2 I B G R AVSS2
DVDD XRST V XIIC (NC) (NC) H ODD AVDD OSCOUT OSCIN REF LPF AVSS
R2220 R2218 R2219 2.7K R2225 R2224 R2265 R2266 R2267 R2223 R2222 R2221
R2213 R2215 1K R2214 R2216 1M R2217 1.0K R2212 5.1K
D2210 D2212 D2211
C2238 0.47/50 C2211 12p CH C2210 39p CH C2209 0.1
OSD_RGB(1:5)
SCCY MCCY OSD.R OSD.G OSD.B OSD.BLK OSD.HALF CCD.R CCD.G CCD.B CCD.BLK V.DX2 V.DX1 S_BUSY S_ENB S_DATA PASS RS S_SW
H 1/12

IC2201 (PD5563)

Pin No.	Voltage(V)	Pin No.	Voltage(V)
1	4.3	27	5
2	0.1	28	5
3	0	29	5
4	4.9	30	5
5	0.1	31	0
6	0	32	0
7	0	33	5
8	0	34	5
9	0.2	35	5
10	0.2	36	4.4
11	0	37	4.4
12	5	38	4.4
13	0	39	4.4
14	3.3	40	5
15	0.2	41	0
16	5	42	2.5
17	5	43	5
18	5	44	5
19	1.6	45	2.9
20	1.6	46	0
21	0.3	47	0
22	2.3	48	0
23	0	49	0
24	2.4	50	0
25	1.5	51	0
26	0	52	0

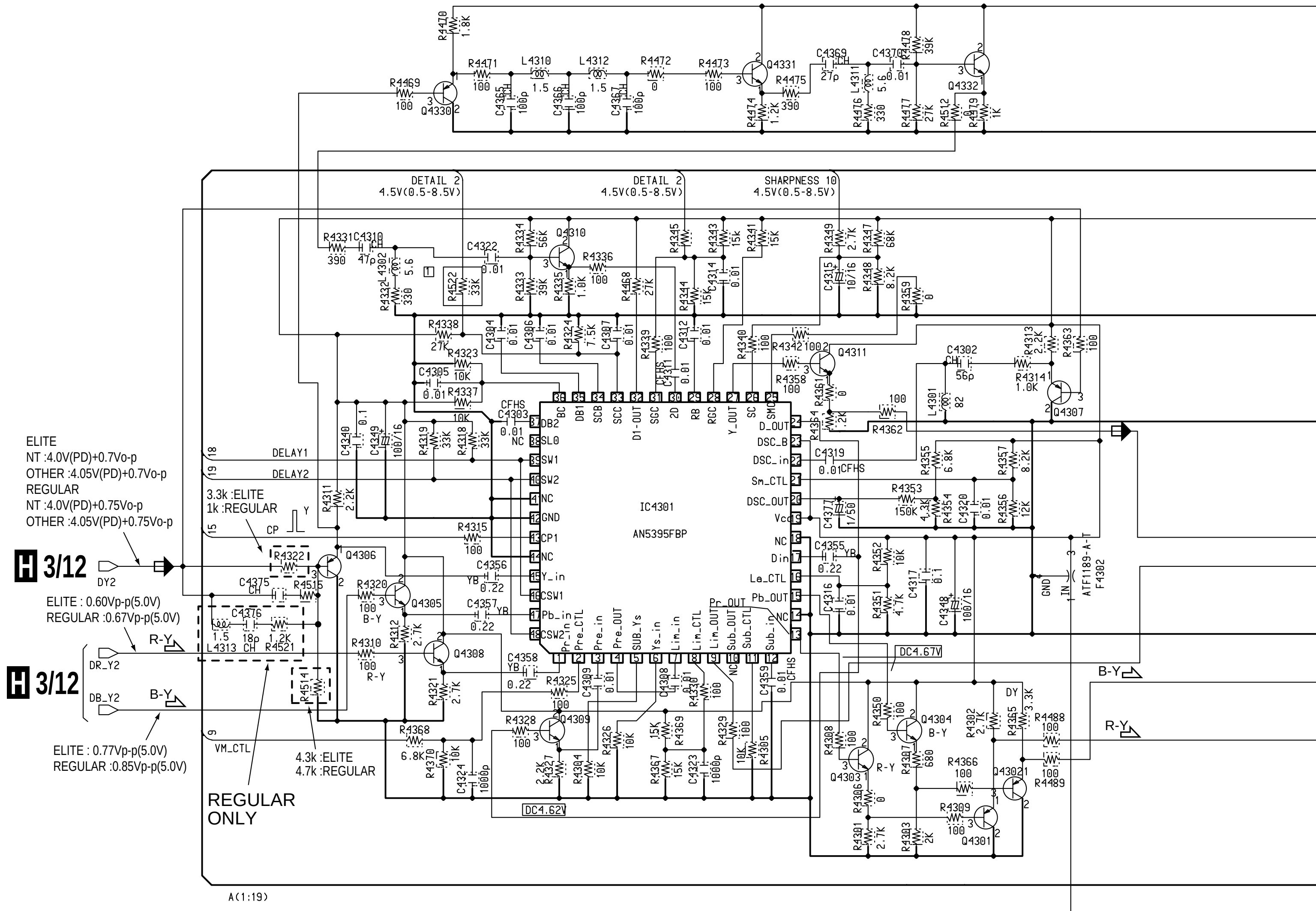
H 4/12 SUB VIDEO SERVICE ASSY (AWV1819 :ELITE)
SUB VIDEO ASSY (AWV1806 :REGULAR)
• SUB UCOM BLOCK


A
B
C
D
F2201
ATF1189-A-T
5V
IN
GND
+5V
H 1/12
CCD.R
CCD.G
CCD.B
CCD.BLK
C2222 100/6.3
C2221 0.1
R2344 3.9K
R2345 1K
R2343 2.2K
R2346 100
Q2207
R2337 3.9K
R2338 1K
R2336 2.2K
R2339 100
Q2205
R2348 3.9K
R2349 1K
R2347 2.2K
R2350 100
Q2208
R2340 100
R2341 2.2K
R2342 100
Q2206
0V
0.6V
H.OSC.SW
33kHz : H
31kHz : L
AUX SW
NTSC : H
OTHER : L
R2302 22K
R2303 10K
R2304 100
R2300 22K
R2301 22K
Q2204
Q2203
0.3V
2.1V
ELITE ONLY
REGULAR ONLY
R2331 100
R2332 100
R2333 100
R2334 100
R2335 100
CCD_RGB(1:8)
D2207
D2206
R2255 47K
R2308 47K
R2309 47K
IC2201 PD5563
SUB UCOM
(M37271)
HSYNC
VSYNC
OPT1
VS
HS
OPT2
AUX SW
S_BUSY
S_ENB
S_DATA
PASS
RS
S_SW
OSD ENB
S_CLK
OSD DATA
OSD CLK
AVcc
HLF
RVCO
VHOLD
CVIN
CNVss
XIN
XOUT
Vss
CC1-R
CC1-G
CC1-B
CC1-BLK
NC
CC SEL
RGB SW
P RST
P_SCL/P_CLK
P_SDA/P_DATA
P_BUSY
P_ERR
H.OSC SW
SCL3
SCL4
SDA3
SDA4
PLL CLK
PLL DATA
PLL ENB
V O/X2
V O/X1
RESET
OSC2
OSC1
Vcc
DCN1092-A-T
R2269 100
R2226 100
R2227 100
R2230 100
R2231 100
R2232 100
R2279 100
R2299 15K
R2236 100
R2239 2.7K
R2233 1.0K
R2276 100
R2277 100
R2278 100
R2238 100
R2234 2.7K
R2235 100
R2237 100
R2306 5.6K
R2307 22K
R2305 5.6K
R2264 2.7K
R2263 2.7K
C2234 1750
R2206 1.0K
C2205 CH
R2207 15K
C2228 YB 1000p
CC Y1
R2281 22K
R2268 100
R2229 1K
R2282 100
R2270 100
R2271 100
R2272 100
R2273 100
R2274 15K
R2275
R2245 100
R2243 100
R2242 100
R2262 100
R2261 100
R2211 100
R2390 47K
R2391 47K
Q2210
R2285 22K
R2286 10K
R2283 47K
R2287 100
R2284 47K
Q2202
Q2201
2.9V
R2280 22K
R2228 22K
R2383 5.6K
R2384 5.6K
R2388 22K
R2389 DUMMY
D2218
D2215
R2241 5.6K
R2240 5.6K
R2246 5.6K
R2244 5.6K
R2385 22K
R2386 22K
R2387 22K
D2216
D2217
IC2203 PST9146N-TLB
VCC
VOUT
NC
SUB
GND
R2247 4.7K
D2204 RD6.8MB-TLB
R2210 1.0K
C2223 0.01
C2224 1000p
L2203 ATC1037-
C2207 15p CH
C2208 15p CH
C2225 0.1
C2226 100/6.3
D2205 RD6.8MB-TLB
C2206 560p CH
R2209 1M
R2208 470
D2203
C2227 0.1
MCCY
L2201 5.6
C2229 100/6.3
X2202 ASS1015-
P_RST
P_CLK
P_DATA
P_BUSY
P_ERR
H 10/12
PLL_CLK
PLL_DATA
PLL_ENB
H 6/12
H 12/12
AUX.SW
H.OSC.SW2
VS
HS
DV
DH
DH.BLK
H 3/12
H.PHA.ADJ
H.SIZE.ADJ
VM_Y
SDA2
SCL2
H 5/12
V.BLK2
V.BLK0
H 2/12
S_CLK
RGB.SW
SCL3
SCL4
SDA3
SDA4
SCL2
SDA2
AUX.SW
ABL
DH.BLK
V.BLK0

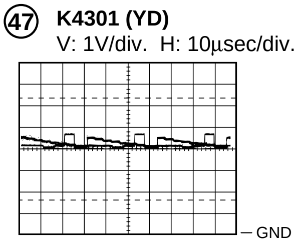
Notes
1.RESISTORS : Indicated in Ω
tolerance unless otherwise noted k kΩ
2.CAPASITORS : Indicated in capacity(uF)/Voltage unless otherwise noted p pF
Indication without voltage is 50V
except electrolytic capacitor.

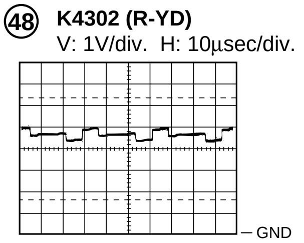
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS352-TRB
1SS226-TRB
1/16W

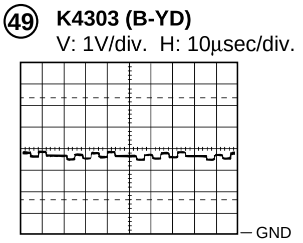
3.21 SUB VIDEO SERVICE and SUB VIDEO ASSYS (5/12)



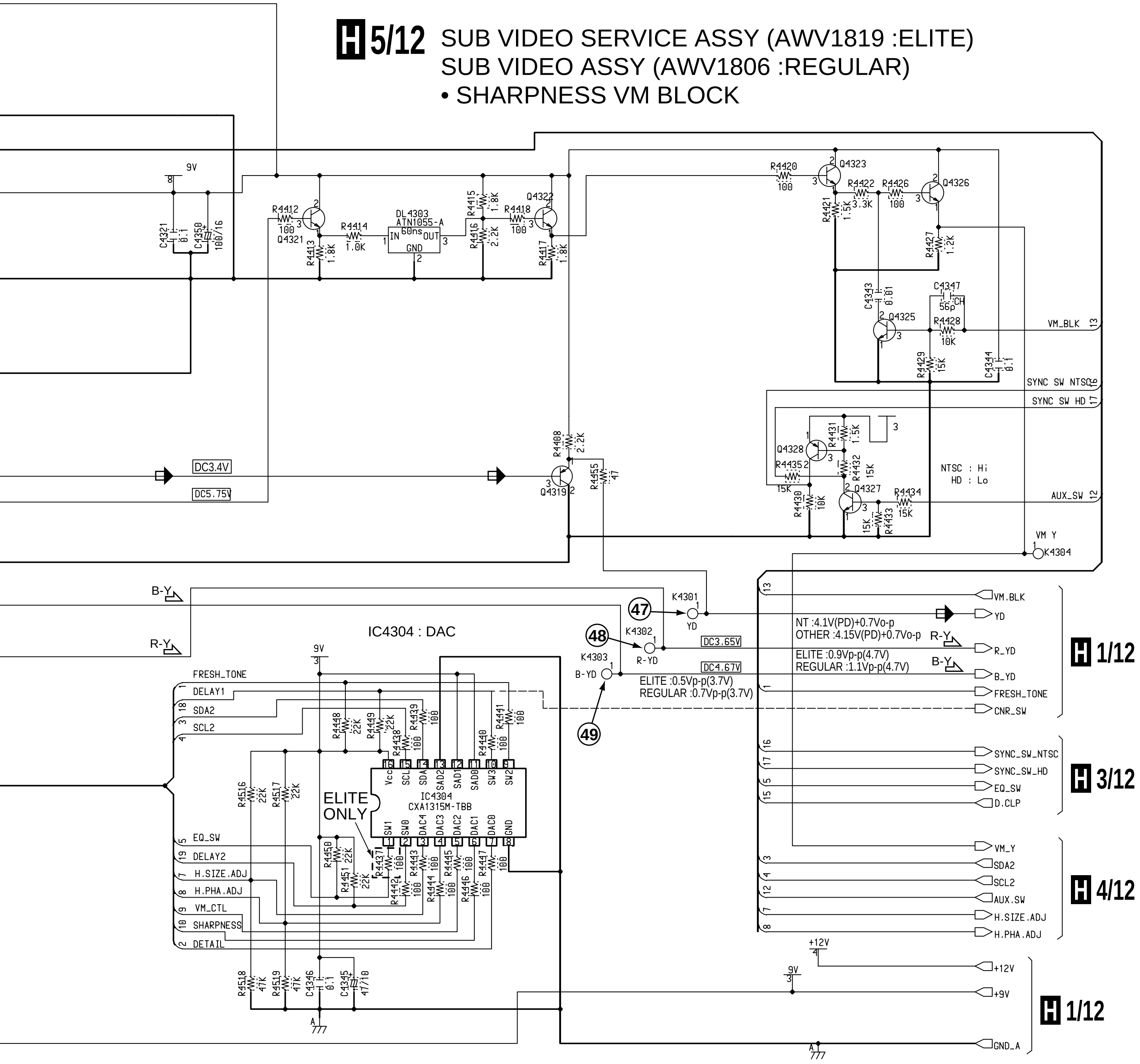
ELITE
NT :4.0V(PD)+0.7Vo-p
OTHER :4.05V(PD)+0.7Vo-p
REGULAR
NT :4.0V(PD)+0.75Vo-p
OTHER :4.05V(PD)+0.75Vo-p
H 3/12
DY2
ELITE : 0.60Vp-p(5.0V)
REGULAR :0.67Vp-p(5.0V)
H 3/12
DR_Y2
DB_Y2
R-Y
B-Y
ELITE : 0.77Vp-p(5.0V)
REGULAR :0.85Vp-p(5.0V)
3.3k :ELITE
1k :REGULAR
4.3k :ELITE
4.7k :REGULAR
REGULAR ONLY
DELAY1
DELAY2
VM_CTL
DETAIL 2 4.5V(0.5-8.5V)
DETAIL 2 4.5V(0.5-8.5V)
SHARPNESS 10 4.5V(0.5-8.5V)
IC4301
AN5395FBP
Q4301
Q4302
Q4303
Q4304
Q4305
Q4306
Q4307
Q4308
Q4309
Q4310
Q4311
Q4330
Q4331
Q4332
F4302
ATF1189-A-T
DC4.67V
DC4.62V
A(1:19)


⑰ **K4301 (YD)**
V: 1V/div. H: 10µsec/div.


⑱ **K4302 (R-YD)**
V: 1V/div. H: 10µsec/div.


⑲ **K4303 (B-YD)**
V: 1V/div. H: 10µsec/div.

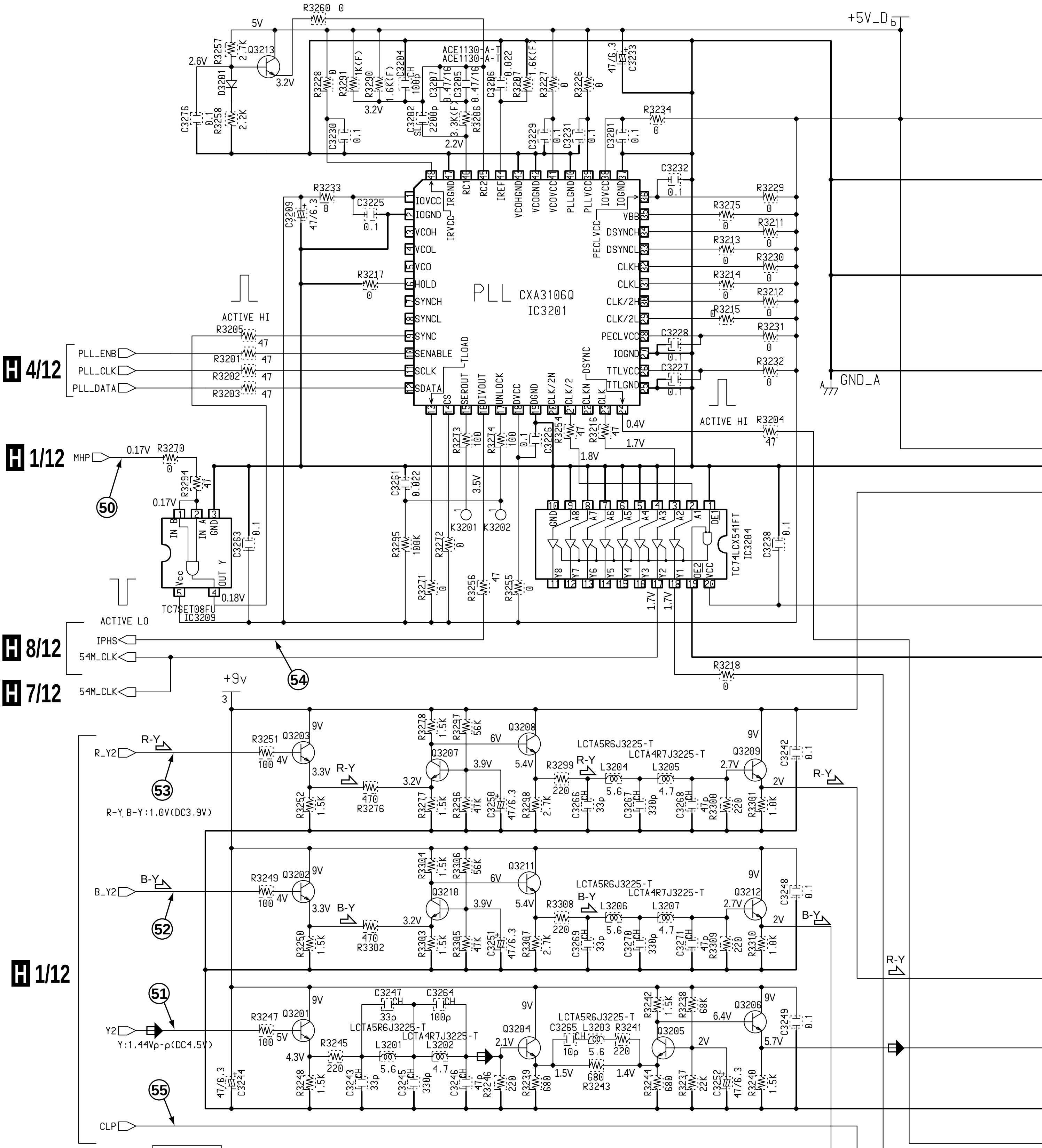
H 5/12 SUB VIDEO SERVICE ASSY (AWV1819 :ELITE)
SUB VIDEO ASSY (AWV1806 :REGULAR)
• SHARPNESS VM BLOCK


9V
C4321 0.1
C4350 100/16
R4412 100
Q4321
R4413 1.8K
R4414 1.0K
DL4303 ATN1055-A 60ns
IN OUT GND
R4415 1.8K
R4416 2.2K
R4418 100
Q4322
R4417 1.8K
R4420 100
Q4323
R4421 1.5K
R4422 3.3K
R4426 100
Q4326
R4427 1.2K
C4343 0.01
C4347 56p CH
Q4325
R4428 10K
R4429 15K
C4344 0.1
VM_BLK 13
SYNC SW NTSC 16
SYNC SW HD 17
R4431 1.5K
Q4328
R4435 15K
R4432 15K
NTSC : Hi
HD : Lo
Q4327
R4434 15K
R4430 10K
R4433 15K
AUX_SW 12
VM Y
K4304
R4408 2.2K
R4455 47
Q4319
DC3.4V
DC5.75V
B-Y
R-Y
IC4304 : DAC
47
K4301
YD
48
K4302
R-YD
49
K4303
B-YD
DC3.65V
DC4.67V
NT :4.1V(PD)+0.7Vo-p
OTHER :4.15V(PD)+0.7Vo-p
ELITE :0.9Vp-p(4.7V)
REGULAR :1.1Vp-p(4.7V)
ELITE :0.5Vp-p(3.7V)
REGULAR :0.7Vp-p(3.7V)
FRESH_TONE
DELAY1
SDA2
SCL2
R4448 22K
R4449 22K
R4438
R4439 100
R4440 100
R4441 100
Vcc SCL SDA SAD2 SAD1 SAD0 SW3 SW2
IC4304 CXA1315M-TBB
ELITE ONLY
SW1 SW0 DAC4 DAC3 DAC2 DAC1 DAC0 GND
R4516 22K
R4517 22K
EQ_SW
DELAY2
H.SIZE.ADJ
H.PHA.ADJ
VM_CTL
SHARPNESS
DETAIL
R4450 22K
R4451 22K
R4437
R4442
R4443 100
R4444 100
R4445 100
R4446 100
R4447 100
R4518 47K
R4519 47K
C4346 0.1
C4345 47/10
VM.BLK
YD
R_YD
B_YD
FRESH_TONE
CNR_SW
H 1/12
SYNC_SW_NTSC
SYNC_SW_HD
EQ_SW
D.CLP
H 3/12
VM_Y
SDA2
SCL2
AUX.SW
H.SIZE.ADJ
H.PHA.ADJ
H 4/12
+12V
+9V
GND_A
H 1/12

- Resistor indicated in ohm,1/16W±5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.
- Transistor
  - 2SA1162(TGR)-TLB
  - 2SC2712(YGR)-TLB
- Diode
  - 1SS352-TRB

➡ : Y SIGNAL ROUTE
R-Y : R-Y SIGNAL ROUTE
B-Y : B-Y SIGNAL ROUTE

3.22 SUB VIDEO SERVICE ASSY (6/12) (ELITE ONLY)


A
B
C
D
+5V_D
5V
R3260 0
Q3213
2.6V
3.2V
D3201
R3257 2.7K
R3258 2.2K
C3276 0.1
ACE1130-A-T
C3233 47/6.3
R3234 0
PLL CXA3106Q
IC3201
IOVCC
IOGND
VCOH
VCOL
VCO
HOLD
SYNCH
SYNCL
SYNC
SENABLE
SCLK
SDATA
VBB
DSYNCH
DSYNCL
CLKH
CLKL
CLK/2H
CLK/2L
PECLVCC
IOGND
TTLVCC
TTLGND
GND_A
ACTIVE HI
H 4/12
PLL_ENB
PLL_CLK
PLL_DATA
R3205 47
R3201 47
R3202 47
R3203 47
H 1/12
MHP
0.17V
R3270 0
R3294 47
50
TC7SET08FU
IC3209
0.18V
ACTIVE LO
H 8/12
IPHS
54M_CLK
H 7/12
54M_CLK
54
K3201
K3202
TC74LCX541FT
IC3204
R3218 0
R3204 47
0.4V
1.7V
1.8V
3.5V
+9V
R-Y
R_Y2
53
R-Y,B-Y:1.0V(DC3.9V)
Q3203
Q3207
Q3208
Q3209
LCTA5R6J3225-T
LCTA4R7J3225-T
L3204 5.6
L3205 4.7
B-Y
B_Y2
52
Q3202
Q3210
Q3211
Q3212
L3206 5.6
L3207 4.7
H 1/12
51
Y2
Y:1.44Vp-p(DC4.5V)
Q3201
Q3204
Q3205
Q3206
L3201 5.6
L3202 4.7
L3203 5.6
55
CLP

NOTE

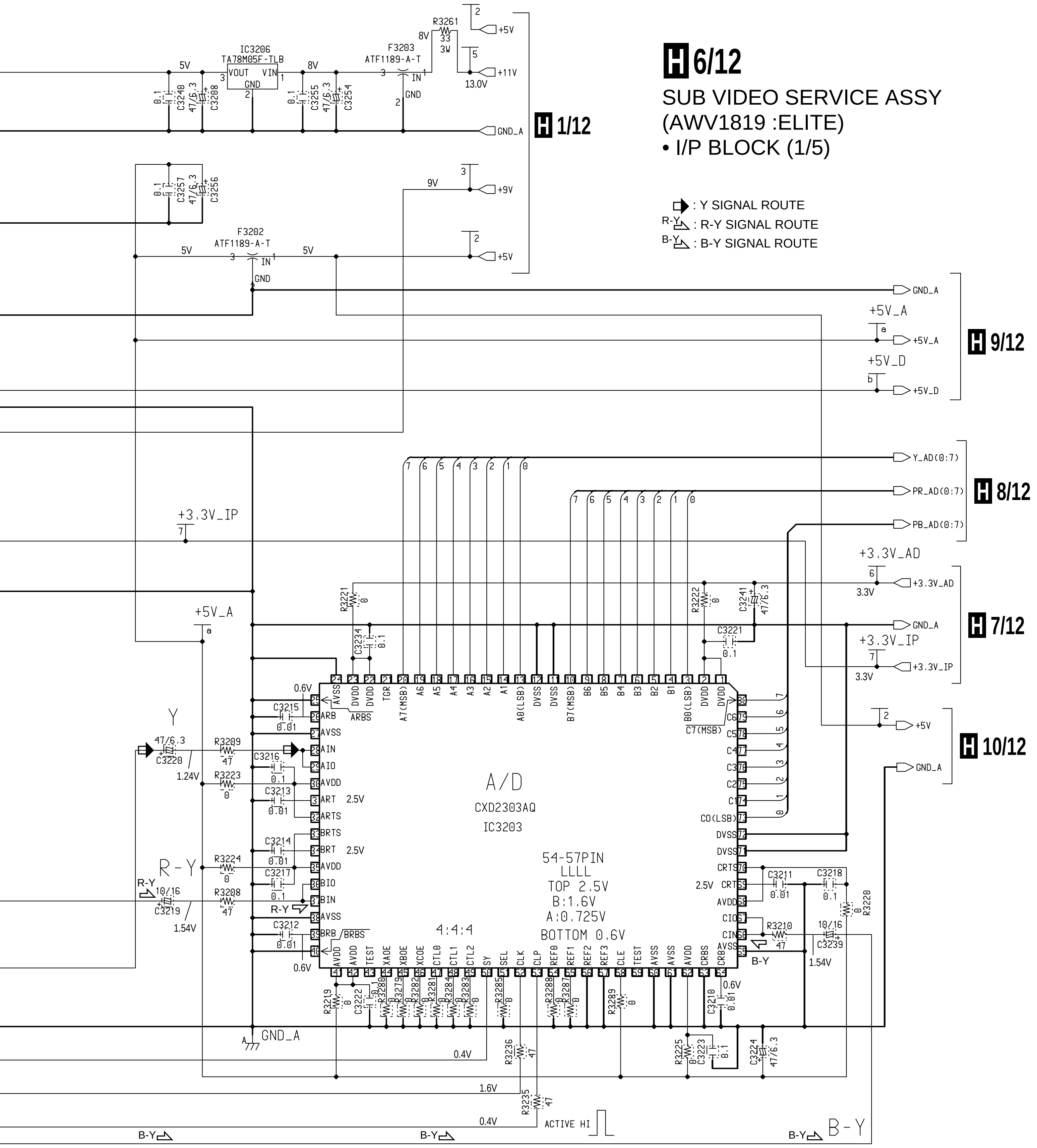
- Resistor indicated in ohm,1/10W±5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.

1/16W
○ AKX9002-A-T
QTL1013-A-T
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS226-TRB
1SS352-TRB

H 6/12

SUB VIDEO SERVICE ASSY
(AWV1819 :ELITE)
• I/P BLOCK (1/5)

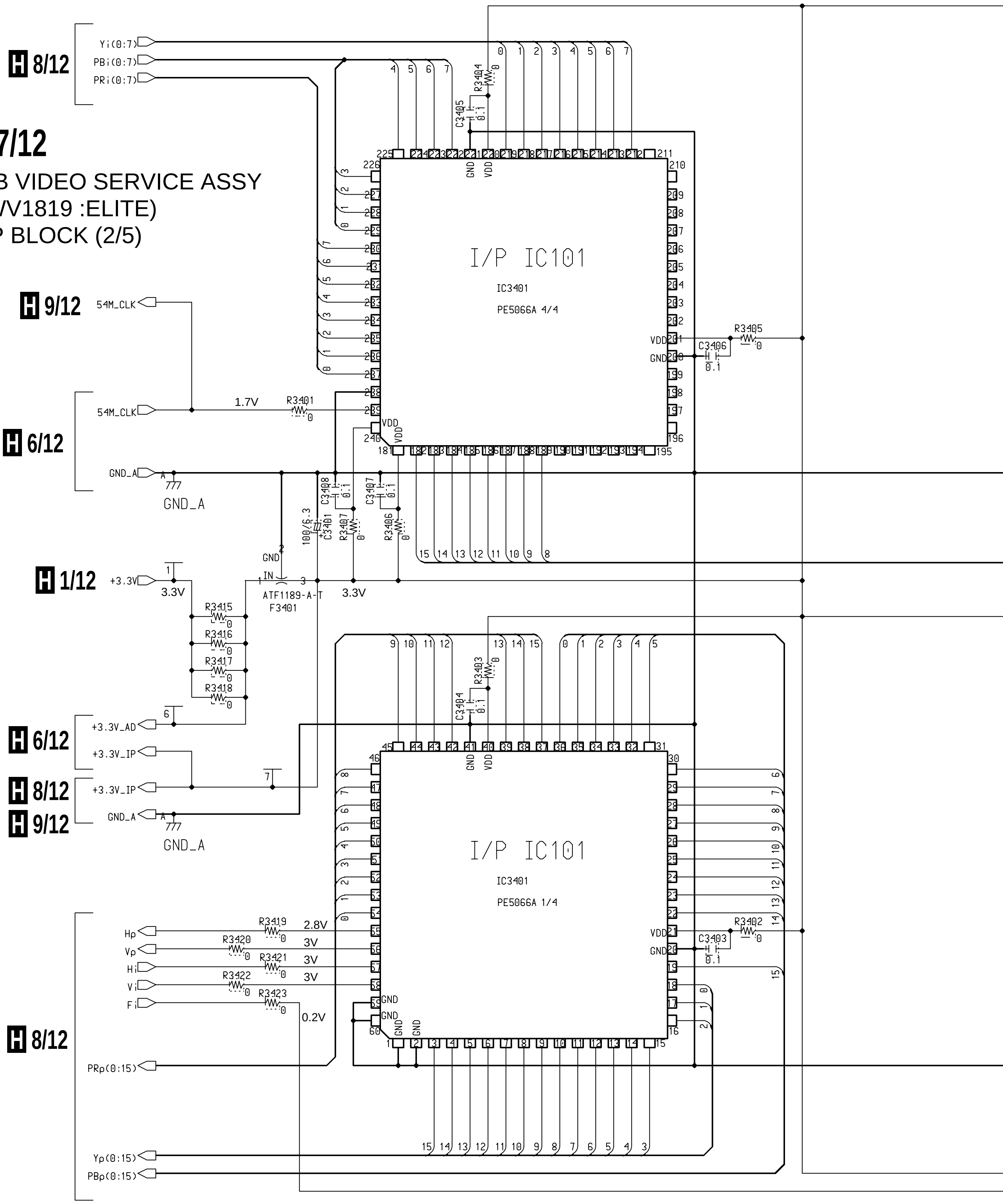
▶ : Y SIGNAL ROUTE
R-Y ▷ : R-Y SIGNAL ROUTE
B-Y ▷ : B-Y SIGNAL ROUTE

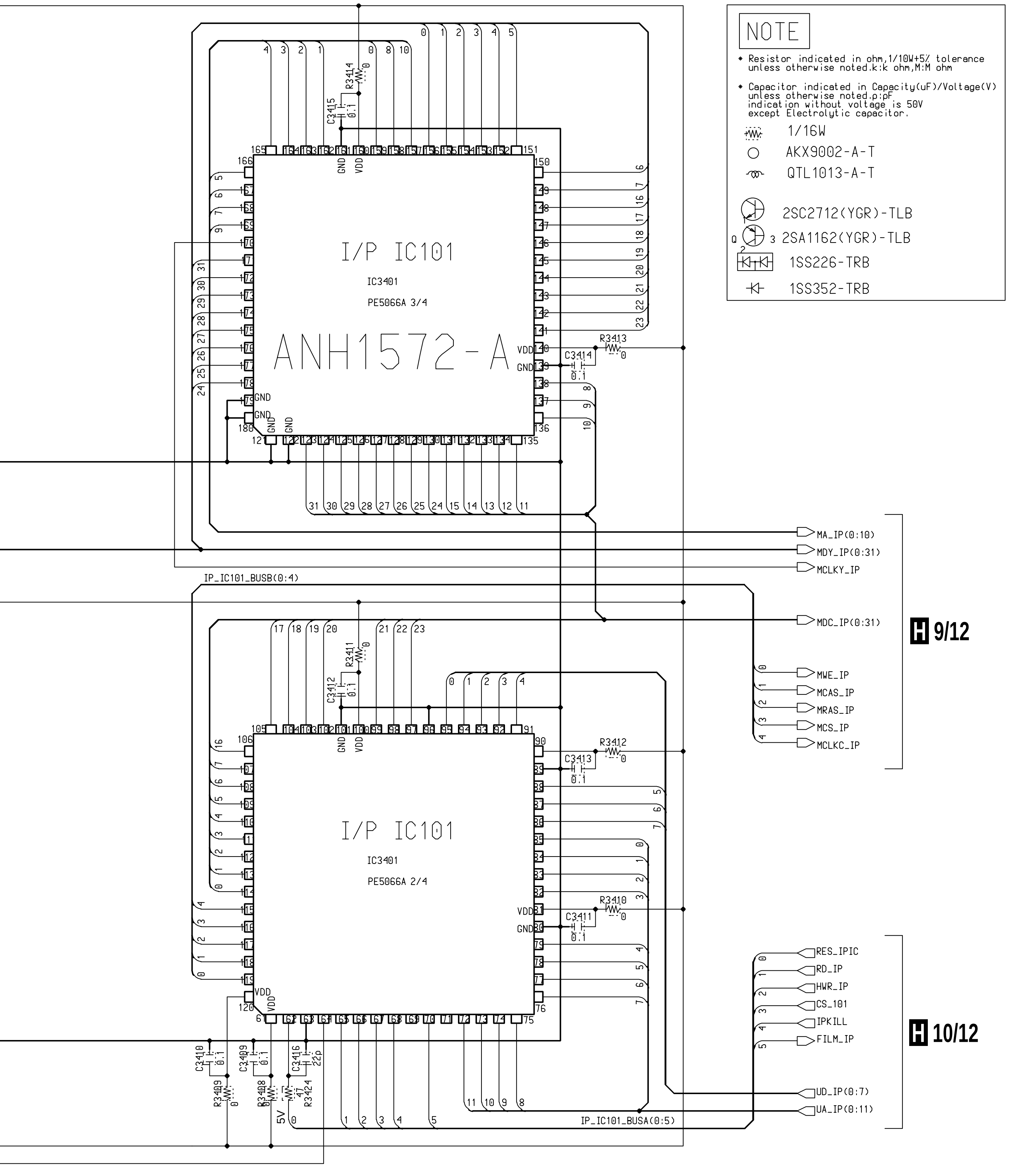

IC3206
TA78M05F-TLB
VOUT VIN
GND
5V
8V
R3261
33
3W
F3203
ATF1189-A-T
IN
GND
13.0V
+5V
+11V
GND_A
H 1/12
C3240
C3208
C3255
C3254
0.1
47/6.3
C3257
C3256
9V
+9V
F3202
ATF1189-A-T
+5V
GND_A
+5V_A
+5V_D
H 9/12
Y_AD(0:7)
PR_AD(0:7)
PB_AD(0:7)
H 8/12
+3.3V_IP
+3.3V_AD
+3.3V_AD
3.3V
GND_A
+3.3V_IP
H 7/12
+5V
GND_A
H 10/12
R3221
C3234
R3222
C3241
C3221
+5V_A
Y
47/6.3
C3220
R3209
47
1.24V
R3223
0
C3215
0.01
C3216
C3213
C3214
C3217
C3212
R-Y
10/16
C3219
R3224
R3208
1.54V
0.6V
2.5V
A/D
CXD2303AQ
IC3203
54-57PIN
LLLL
TOP 2.5V
B:1.6V
A:0.725V
BOTTOM 0.6V
4:4:4
AVSS
ARB
ARBS
AIN
AIO
AVDD
ART
ARTS
BRTS
BRT
BIO
BIN
BRB
BRBS
DVDD
TGR
A7(MSB)
A6
A5
A4
A3
A2
A1
A0(LSB)
DVSS
B7(MSB)
B6
B5
B4
B3
B2
B1
B0(LSB)
C7(MSB)
C6
C5
C4
C3
C2
C1
C0(LSB)
CRTS
CRT
CIO
CIN
TEST
XAOE
XBOE
XCOE
CTL0
CTL1
CTL2
SY
SEL
CLK
CLP
REF0
REF1
REF2
REF3
CLE
CRBS
CRB
C3211
C3218
R3220
R3210
C3239
B-Y
R3219
C3222
R3280
R3279
R3282
R3281
R3284
R3283
R3285
R3288
R3287
R3289
C3210
R3236
R3235
R3225
C3223
C3224
GND_A
0.4V
1.6V
ACTIVE HI
B-Y

3.23 SUB VIDEO SERVICE ASSY (7/12) (ELITE ONLY)

H 7/12

SUB VIDEO SERVICE ASSY
(AWV1819 :ELITE)
• I/P BLOCK (2/5)


H 8/12
Yi(0:7)
PBi(0:7)
PRi(0:7)
H 9/12
54M_CLK
H 6/12
54M_CLK
1.7V
R3401
0
GND_A
A
GND_A
H 1/12
+3.3V
1
3.3V
R3415
R3416
R3417
R3418
0
GND
IN
1
2
3
ATF1189-A-T
F3401
3.3V
100/6.3
C3401
C3408
0.1
C3407
0.1
R3407
0
R3406
0
H 6/12
+3.3V_AD
6
+3.3V_IP
H 8/12
+3.3V_IP
7
H 9/12
GND_A
A
GND_A
C3405
0.1
R3404
0
I/P IC101
IC3401
PE5066A 4/4
VDD
GND
R3405
0
C3406
0.1
C3404
0.1
R3403
0
I/P IC101
IC3401
PE5066A 1/4
R3402
0
C3403
0.1
H 8/12
Hp
Vp
Hi
Vi
Fi
R3419
2.8V
R3420
3V
R3421
3V
R3422
3V
R3423
0.2V
PRp(0:15)
Yp(0:15)
PBp(0:15)

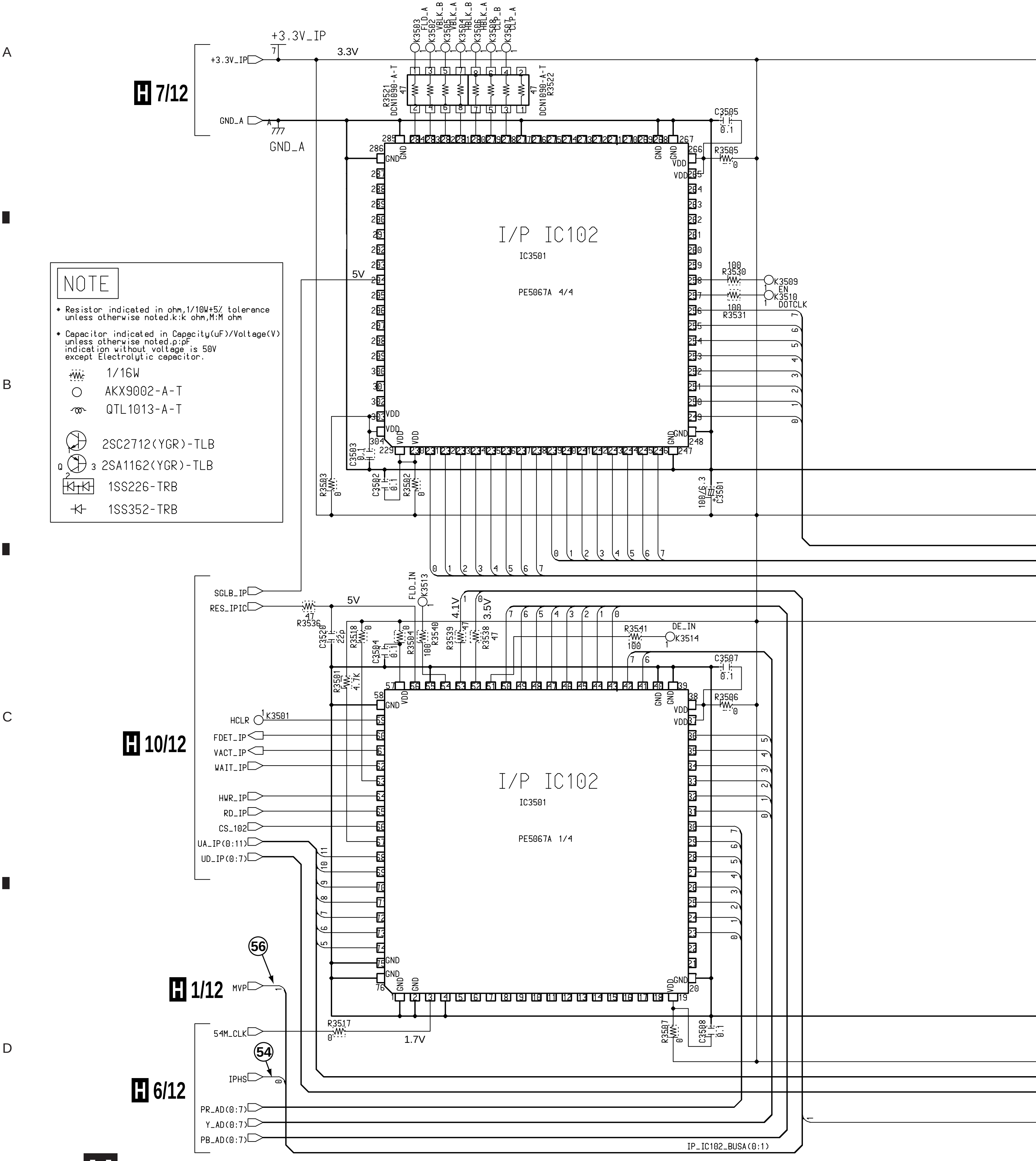

I/P IC101
IC3401
PE5066A 3/4
ANH1572-A
I/P IC101
IC3401
PE5066A 2/4
R3414 0
C3415 0.1
R3413 0
C3414 0.1
R3411 0
C3412 0.1
R3412 0
C3413 0.1
R3410 0
C3411 0.1
C3410 0.1
C3409 0.1
C3416 22p
R3409 0
R3408 0
R3424 47
5V
VDD
GND
IP_IC101_BUSB(0:4)
IP_IC101_BUSA(0:5)
MA_IP(0:10)
MDY_IP(0:31)
MCLKY_IP
MDC_IP(0:31)
MWE_IP
MCAS_IP
MRAS_IP
MCS_IP
MCLKC_IP
H 9/12
RES_IPIC
RD_IP
HWR_IP
CS_101
IPKILL
FILM_IP
UD_IP(0:7)
UA_IP(0:11)
H 10/12

NOTE

- Resistor indicated in ohm,1/10W+5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capecity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.

1/16W
AKX9002-A-T
QTL1013-A-T
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS226-TRB
1SS352-TRB

3.24 SUB VIDEO SERVICE ASSY (8/12) (ELITE ONLY)


A
B
C
D
H 7/12
+3.3V_IP
GND_A
3.3V
K3503 FLD_A
K3502 VBLK_B
K3505 VBLK_A
K3504 HBLK_B
K3506 HBLK_A
K3508 CLP_B
K3507 CLP_A
R3521 DCN1090-A-T 47
R3522 DCN1090-A-T 47
C3505 0.1
R3505 0
I/P IC102
IC3501
PE5067A 4/4
5V
R3530 100
R3531 100
K3509 EN
K3510 DOTCLK
GND
VDD
C3503 0.1
R3503 0
C3502 0.1
R3502 0
C3501 100/6.3
SGLB_IP
RES_IPIC
R3536 47
C3520 22p
R3518 0
C3504 0.1
R3504 0
FLD_IN
K3513
R3540 100
4.1V
3.5V
R3539 47
R3538 47
R3541 100
DE_IN
K3514
C3507 0.1
R3506 0
R3501 4.7K
H 10/12
HCLR
K3501
FDET_IP
VACT_IP
WAIT_IP
HWR_IP
RD_IP
CS_102
UA_IP(0:11)
UD_IP(0:7)
I/P IC102
IC3501
PE5067A 1/4
56
H 1/12
MVP
54M_CLK
R3517 0
1.7V
R3507 0
C3508 0.1
54
H 6/12
IPHS
PR_AD(0:7)
Y_AD(0:7)
PB_AD(0:7)
IP_IC102_BUSA(0:1)
1
2
3
4

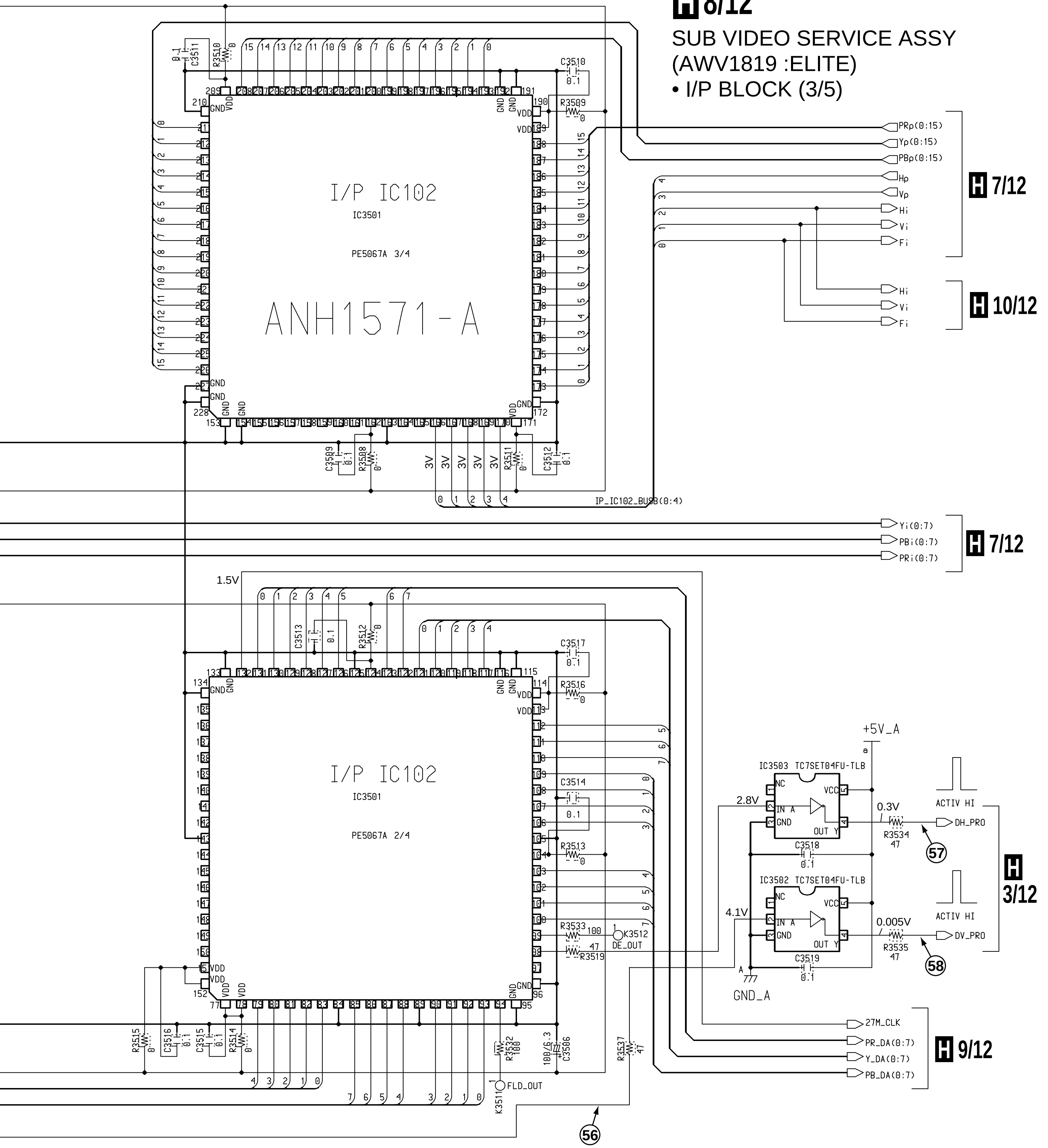
NOTE

- Resistor indicated in ohm,1/10W+5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.

	1/16W
○	AKX9002-A-T
	QTL1013-A-T
	2SC2712(YGR)-TLB
Q	2SA1162(YGR)-TLB
	1SS226-TRB
	1SS352-TRB

H 8/12

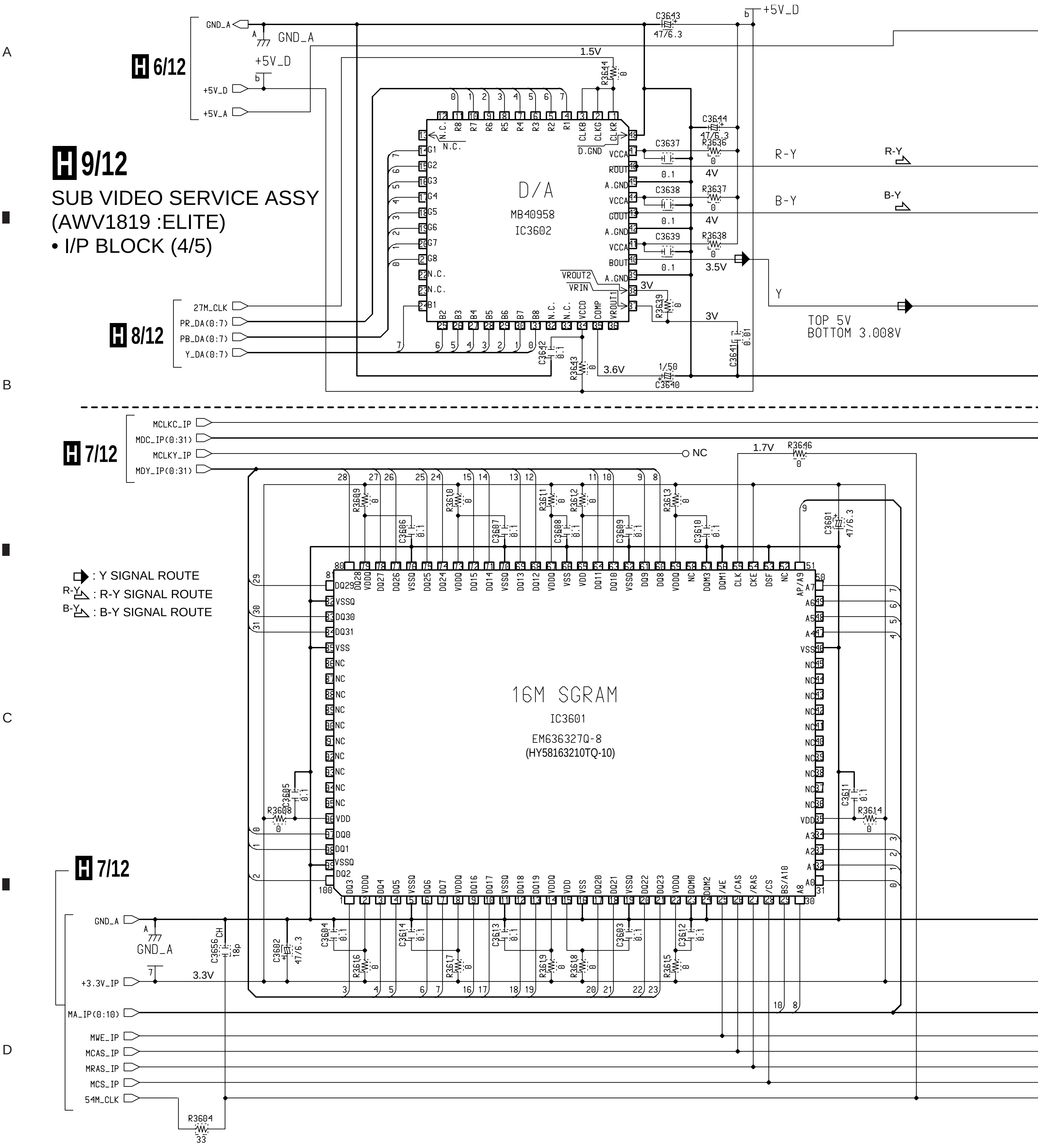
SUB VIDEO SERVICE ASSY
(AWV1819 :ELITE)
• I/P BLOCK (3/5)


I/P IC102
IC3501
PE5067A 3/4
ANH1571-A
I/P IC102
IC3501
PE5067A 2/4
C3511 0.1
R3510 0
C3510 0.1
R3509 0
C3509 0.1
R3508 0
3V
3V
3V
3V
3V
R3511 0
C3512 0.1
IP_IC102_BUSB(0:4)
PRp(0:15)
Yp(0:15)
PBp(0:15)
Hp
Vp
Hi
Vi
Fi
H 7/12
Hi
Vi
Fi
H 10/12
Yi(0:7)
PBi(0:7)
PRi(0:7)
H 7/12
1.5V
C3513 0.1
R3512 0
C3517 0.1
R3516 0
C3514 0.1
R3513 0
R3533 100
K3512 DE_OUT
47 R3519
+5V_A
IC3503 TC7SET04FU-TLB
NC
IN A
GND
VCC
OUT Y
2.8V
0.3V
R3534 47
ACTIV HI
DH_PRO
C3518 0.1
IC3502 TC7SET04FU-TLB
4.1V
0.005V
R3535 47
ACTIV HI
DV_PRO
C3519 0.1
GND_A
H 3/12
57
58
R3515 0
C3516 0.1
C3515 0.1
R3514 0
R3532 100
100/6.3 C3506
R3537 47
K3511 FLD_OUT
56
27M_CLK
PR_DA(0:7)
Y_DA(0:7)
PB_DA(0:7)
H 9/12

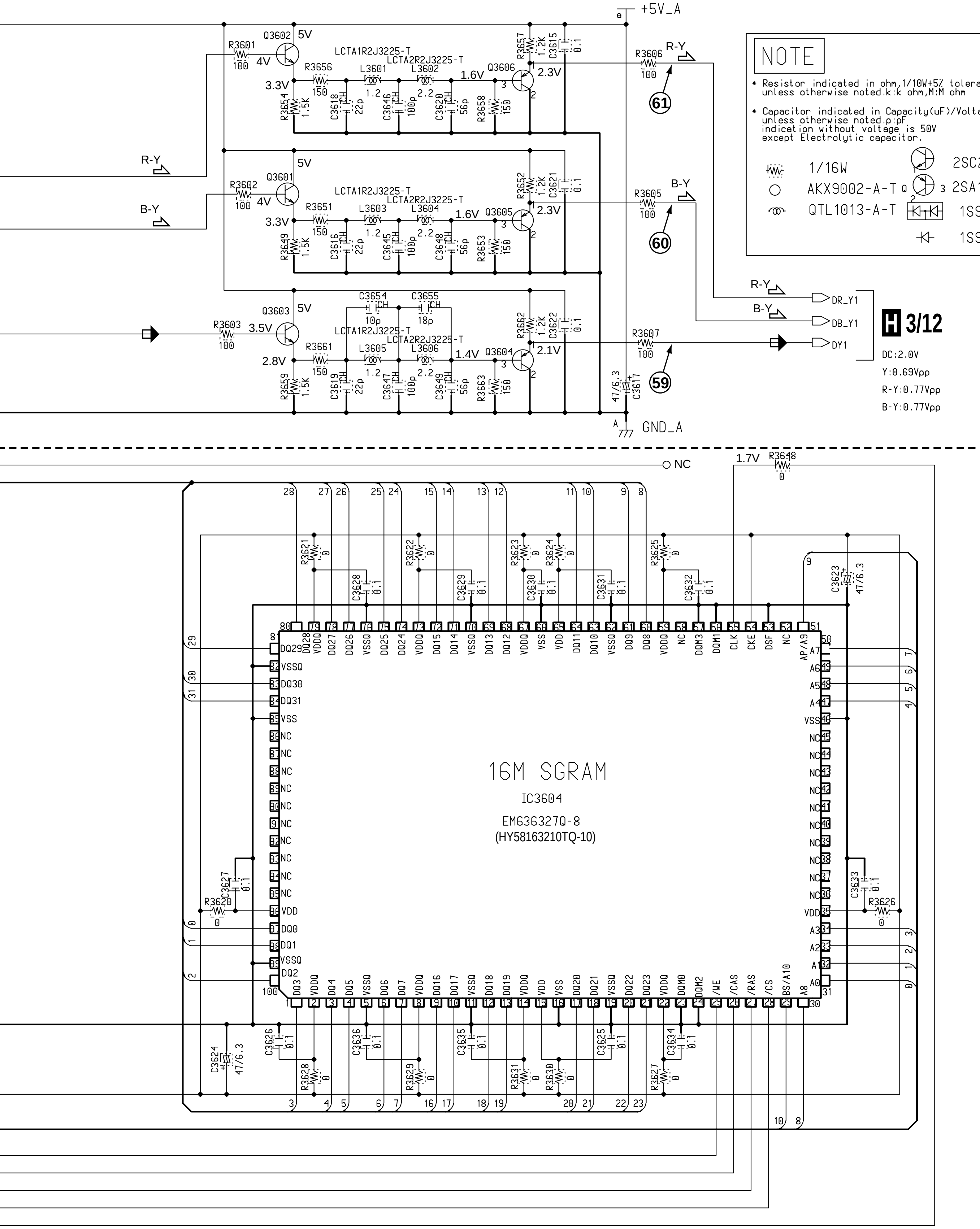
3.25 SUB VIDEO SERVICE ASSY (9/12) (ELITE ONLY)

H 9/12

SUB VIDEO SERVICE ASSY
(AWV1819 :ELITE)
- I/P BLOCK (4/5)


A
B
C
D
H 6/12
GND_A
+5V_D
+5V_A
1.5V
C3643
47/6.3
R3644
0
C3644
47/6.3
C3637
R3636
C3638
R3637
C3639
R3638
0.1
4V
3.5V
3V
3.6V
R-Y
B-Y
Y
TOP 5V
BOTTOM 3.008V
D/A
MB40958
IC3602
N.C.
R8 R7 R6 R5 R4 R3 R2 R1
CLKB CLKG CLKR
D.GND
VCCA
ROUT
A.GND
GOUT
BOUT
VRIN
VROUT1
VROUT2
G1 G2 G3 G4 G5 G6 G7 G8
B1 B2 B3 B4 B5 B6 B7 B8
VCCD
COMP
C3642
R3643
R3639
C3641
0.01
1/50
C3640
H 8/12
27M_CLK
PR_DA(0:7)
PB_DA(0:7)
Y_DA(0:7)
H 7/12
MCLKC_IP
MDC_IP(0:31)
MCLKY_IP
MDY_IP(0:31)
NC
1.7V
R3646
R3609 R3610 R3611 R3612 R3613
C3606 C3607 C3608 C3609 C3610
C3601
47/6.3
16M SGRAM
IC3601
EM636327Q-8
(HY58163210TQ-10)
DQ0–DQ31
VDDQ VSSQ VDD VSS
DQM0 DQM1 DQM2 DQM3
CLK CKE DSF
AP/A9 A0–A8 BS/A10
/WE /CAS /RAS /CS
C3605
R3608
C3611
R3614
C3604 C3614 C3613 C3603 C3612
R3616 R3617 R3619 R3618 R3615
C3656
CH
18p
C3602
47/6.3
3.3V
+3.3V_IP
MA_IP(0:10)
MWE_IP
MCAS_IP
MRAS_IP
MCS_IP
54M_CLK
R3604
33

Y SIGNAL ROUTE
R-Y : R-Y SIGNAL ROUTE
B-Y : B-Y SIGNAL ROUTE


+5V_A
a
Q3602
5V
R3601
100
4V
3.3V
R3656
150
LCTA1R2J3225-T
L3601
1.2
LCTA2R2J3225-T
L3602
2.2
1.6V
Q3606
2.3V
R3657
1.2K
C3615
0.1
R3654
1.5K
C3618
22p
C3646
100p
C3620
56p
R3658
150
R3606
100
R-Y
61
Q3601
R3602
100
B-Y
R3651
150
L3603
1.2
L3604
2.2
1.6V
Q3605
2.3V
R3652
1.2K
C3621
0.1
R3649
1.5K
C3616
22p
C3645
100p
C3648
56p
R3653
150
R3605
100
60
Q3603
R3603
100
3.5V
2.8V
C3654
10p
C3655
18p
CH
R3661
150
L3605
1.2
L3606
2.2
1.4V
Q3604
2.1V
R3662
1.2K
C3622
0.1
R3659
1.5K
C3619
22p
C3647
100p
C3649
56p
R3663
150
R3607
100
47/6.3
C3617
59
GND_A
A
DR_Y1
DB_Y1
DY1
H 3/12
NC
1.7V
R3648
0
16M SGRAM
IC3604
EM636327Q-8
(HY58163210TQ-10)
R3621
R3622
R3623
R3624
R3625
C3628
C3629
C3630
C3631
C3632
C3623
47/6.3
C3627
R3620
C3633
R3626
C3626
C3636
C3635
C3625
C3634
C3624
47/6.3
R3628
R3629
R3631
R3630
R3627
0
0.1
DQ28 VDDQ DQ27 DQ26 VSSQ DQ25 DQ24 VDDQ DQ15 DQ14 VSSQ DQ13 DQ12 VDDQ VSS VDD DQ11 DQ10 VSSQ DQ9 DQ8 VDDQ NC DQM3 DQM1 CLK CKE DSF NC AP/A9
DQ29 VSSQ DQ30 DQ31 VSS NC NC NC NC NC NC NC NC NC NC VDD DQ0 DQ1 VSSQ DQ2
A7 A6 A5 A4 VSS NC NC NC NC NC NC NC NC NC NC VDD A3 A2 A1 A0
DQ3 VDDQ DQ4 DQ5 VSSQ DQ6 DQ7 VDDQ DQ16 DQ17 VSSQ DQ18 DQ19 VDDQ VDD VSS DQ20 DQ21 VSSQ DQ22 DQ23 VDDQ DQM0 DQM2 /WE /CAS /RAS /CS BS/A10 A8
80 81 50 51 100 1 30 31
28 27 26 25 24 15 14 13 12 11 10 9 8
29 30 31 0 1 2 7 6 5 4 3 2 1 0 9
3 4 5 6 7 16 17 18 19 20 21 22 23 10 8

DC:2.0V
Y:0.69Vpp
R-Y:0.77Vpp
B-Y:0.77Vpp

NOTE

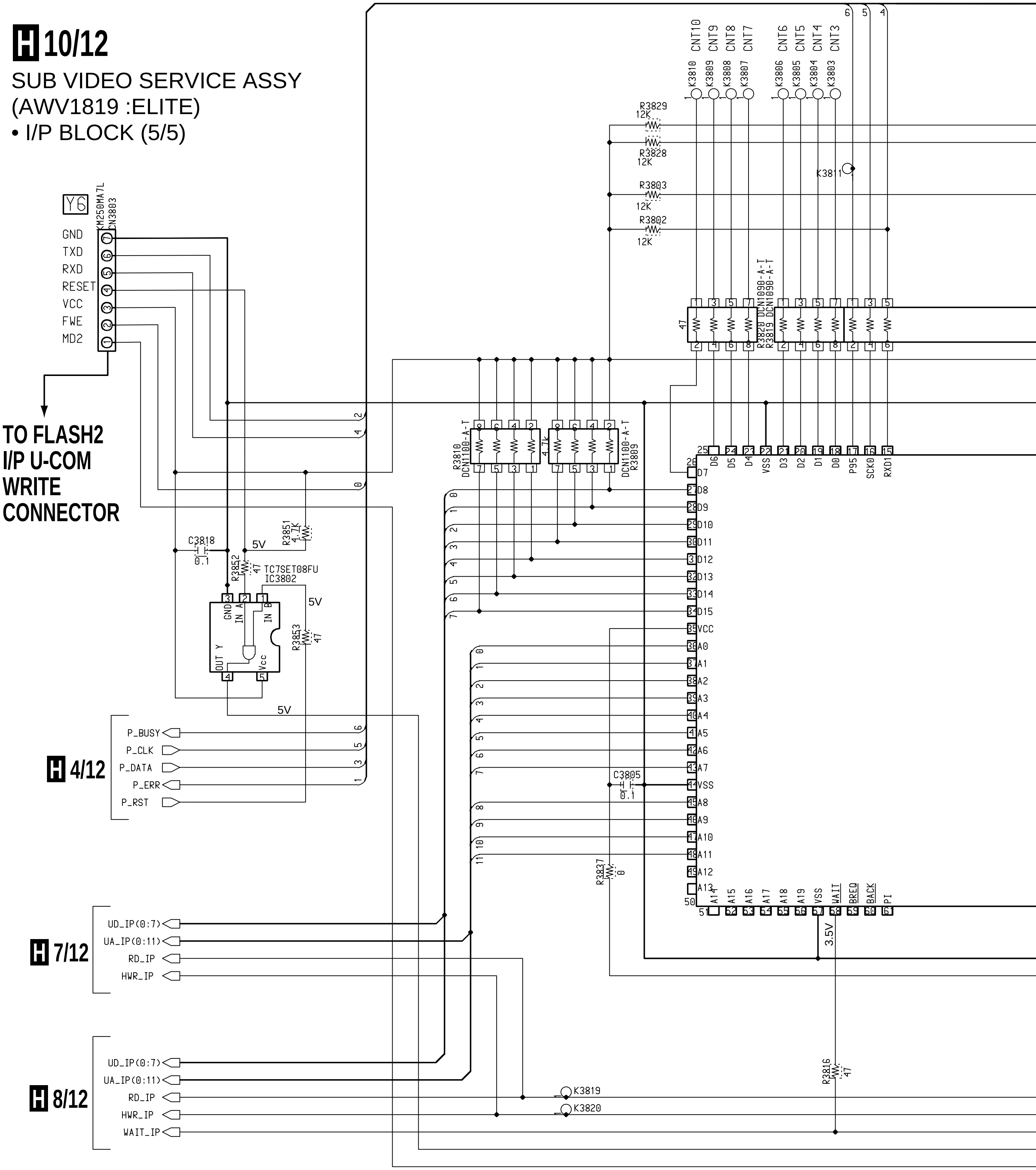
- Resistor indicated in ohm,1/10W±5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.

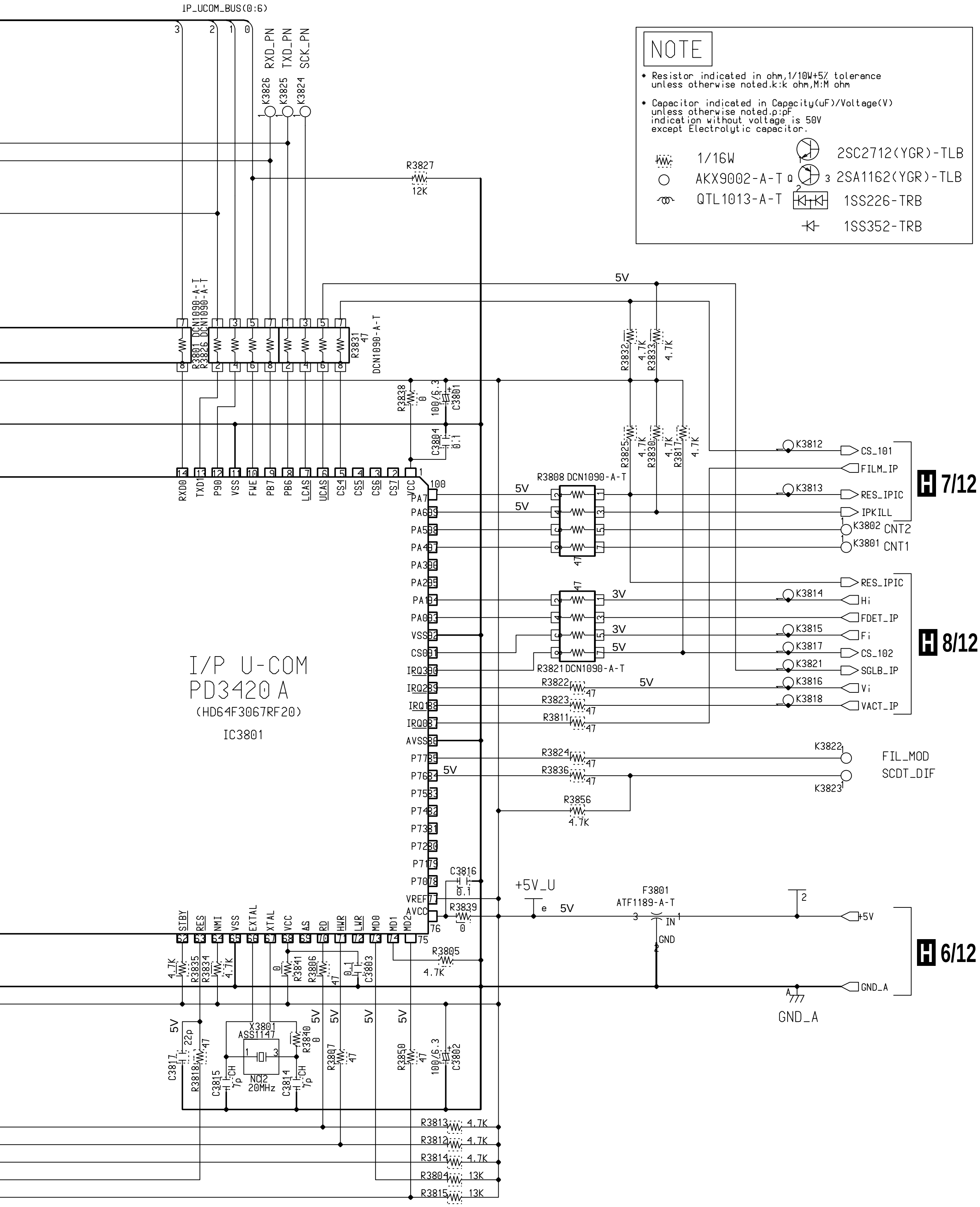
1/16W	2SC2712(YGR)-TLB
AKX9002-A-T	2SA1162(YGR)-TLB
QTL1013-A-T	1SS226-TRB
	1SS352-TRB

3.26 SUB VIDEO SERVICE ASSY (10/12) (ELITE ONLY)

H 10/12

SUB VIDEO SERVICE ASSY
(AWV1819 :ELITE)
• I/P BLOCK (5/5)


Y6
KM250MA7L
CN3803
GND
TXD
RXD
RESET
VCC
FWE
MD2
TO FLASH2
I/P U-COM
WRITE
CONNECTOR
C3818
0.1
5V
R3852
47
R3851
4.7K
TC7SET08FU
IC3802
GND
IN A
IN B
OUT Y
Vcc
5V
R3853
47
5V
H 4/12
P_BUSY
P_CLK
P_DATA
P_ERR
P_RST
H 7/12
UD_IP(0:7)
UA_IP(0:11)
RD_IP
HWR_IP
H 8/12
UD_IP(0:7)
UA_IP(0:11)
RD_IP
HWR_IP
WAIT_IP
K3819
K3820
R3810
DCN1100-A-T
R3809
DCN1100-A-T
4.7k
R3829
12K
R3828
12K
R3803
12K
R3802
12K
K3810 CNT10
K3809 CNT9
K3808 CNT8
K3807 CNT7
K3806 CNT6
K3805 CNT5
K3804 CNT4
K3803 CNT3
K3811
R3820 DCN1090-A-T
R3819 DCN1090-A-T
47
D6
D5
D4
VSS
D3
D2
D1
D0
P95
SCK0
RXD1
D7
D8
D9
D10
D11
D12
D13
D14
D15
VCC
A0
A1
A2
A3
A4
A5
A6
A7
VSS
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
VSS
WAIT
BREQ
BACK
PI
C3805
0.1
R3837
0
3.5V
R3816
47



NOTE

- Resistor indicated in ohm,1/10W±5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 50V except Electrolytic capacitor.

▨	1/16W		2SC2712(YGR)-TLB
○	AKX9002-A-T		2SA1162(YGR)-TLB
	QTL1013-A-T		1SS226-TRB
			1SS352-TRB

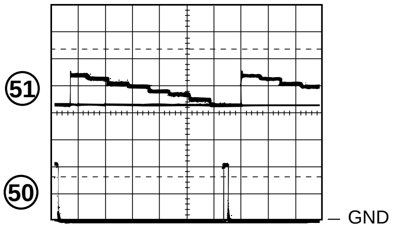
IP_UCOM_BUS(0:6)
K3826 RXD_PN
K3825 TXD_PN
K3824 SCK_PN
R3827 12K
R3801 DCN1090-A-T
R3826 DCN1090-A-T
R3831 47 DCN1090-A-T
5V
R3832 4.7K
R3833 4.7K
R3838 0
C3801 100/6.3
C3804 0.1
R3825 4.7K
R3830 4.7K
R3817 4.7K
RXD0 TXD1 P90 VSS FWE PB7 PB6 LCAS UCAS CS4 CS5 CS6 CS7 VCC
PA7 PA6 PA5 PA4 PA3 PA2 PA1 PA0 VSS CS0 IRQ3 IRQ2 IRQ1 IRQ0 AVSS P77 P76 P75 P74 P73 P72 P71 P70 VREF AVCC
R3808 DCN1090-A-T
R3821 DCN1090-A-T
3V
K3812 CS_101
FILM_IP
K3813 RES_IPIC
IPKILL
K3802 CNT2
K3801 CNT1
RES_IPIC
K3814 Hi
FDET_IP
K3815 Fi
K3817 CS_102
K3821 SGLB_IP
K3816 Vi
K3818 VACT_IP
H 7/12
H 8/12
I/P U-COM
PD3420A
(HD64F3067RF20)
IC3801
R3822 47
R3823 47
R3811 47
R3824 47
R3836 47
R3856 4.7K
K3822 FIL_MOD
K3823 SCDT_DIF
C3816 0.1
R3839 0
+5V_U
F3801 ATF1189-A-T
IN GND
+5V
GND_A
H 6/12
STBY RES NMI VSS EXTAL XTAL VCC AS RD HWR LWR MD0 MD1 MD2
R3805 4.7K
R3835 4.7K
R3834 4.7K
R3841 0
R3806 47
C3803 0.1
X3801 ASS1147
NCI2 20MHz
R3840 0
C3817 22p
R3818 47
C3815 7p CH
C3814 7p CH
R3807 47
R3850 47
C3802 100/6.3
R3813 4.7K
R3812 4.7K
R3814 4.7K
R3804 13K
R3815 13K

H 6/12 - 10/12

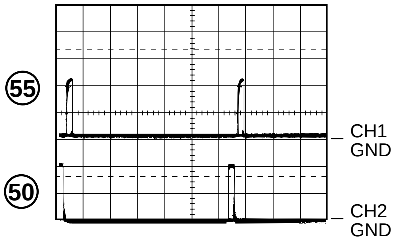
SUB VIDEO SERVICE ASSY (6/12-10/12)

Input signal
Video signal : EIA full field color-bar
Picture quality : Standard
Range :DC range (Unless otherwise noted)

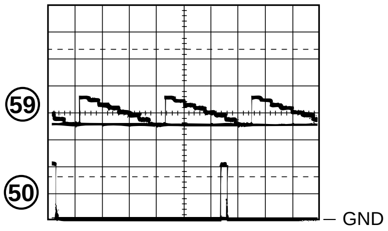
㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(51) **Foot of R3247 (Y2)**
V: 1V/div. H: 10µsec/div.



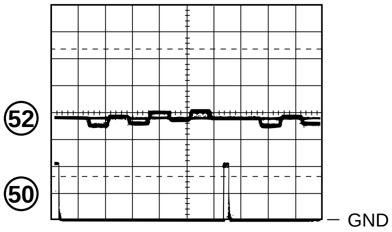
㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(55) **Foot of R3235 (CLP)**
V: 1V/div. H: 10µsec/div.



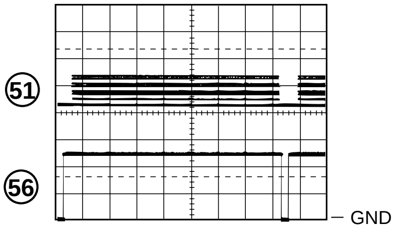
㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(59) **Foot of R3607 (DY1)**
V: 0.5V/div. H: 10µsec/div.



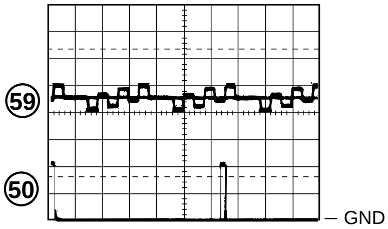
㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(52) **Foot of R3249 (B-Y2)**
V: 1V/div. H: 10µsec/div.



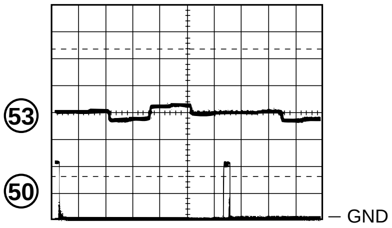
(51) **Foot of R3247 (Y2)**
V: 1V/div. H: 2msec/div.
(56) **Foot of R3537 (MVP)**
V: 2V/div. H: 2msec/div.



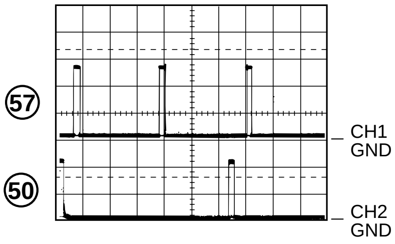
㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(60) **Foot of R33605 (DB_Y1)**
V: 0.5V/div. H: 10µsec/div.



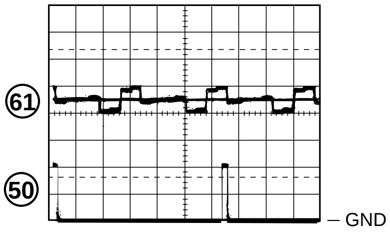
㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(53) **Foot of R3251 (R-Y2)**
V: 1V/div. H: 10µsec/div.



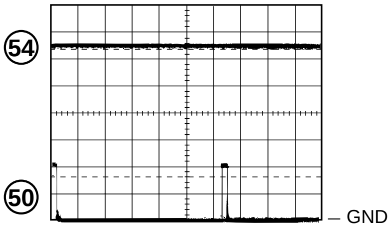
㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(57) **Foot of R3534 (DH_PRO)**
V: 2V/div. H: 10µsec/div.



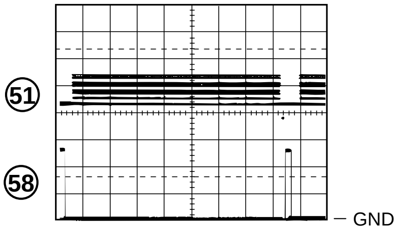
㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(61) **Foot of R3606 (DR_Y1)**
V: 0.5V/div. H: 10µsec/div.

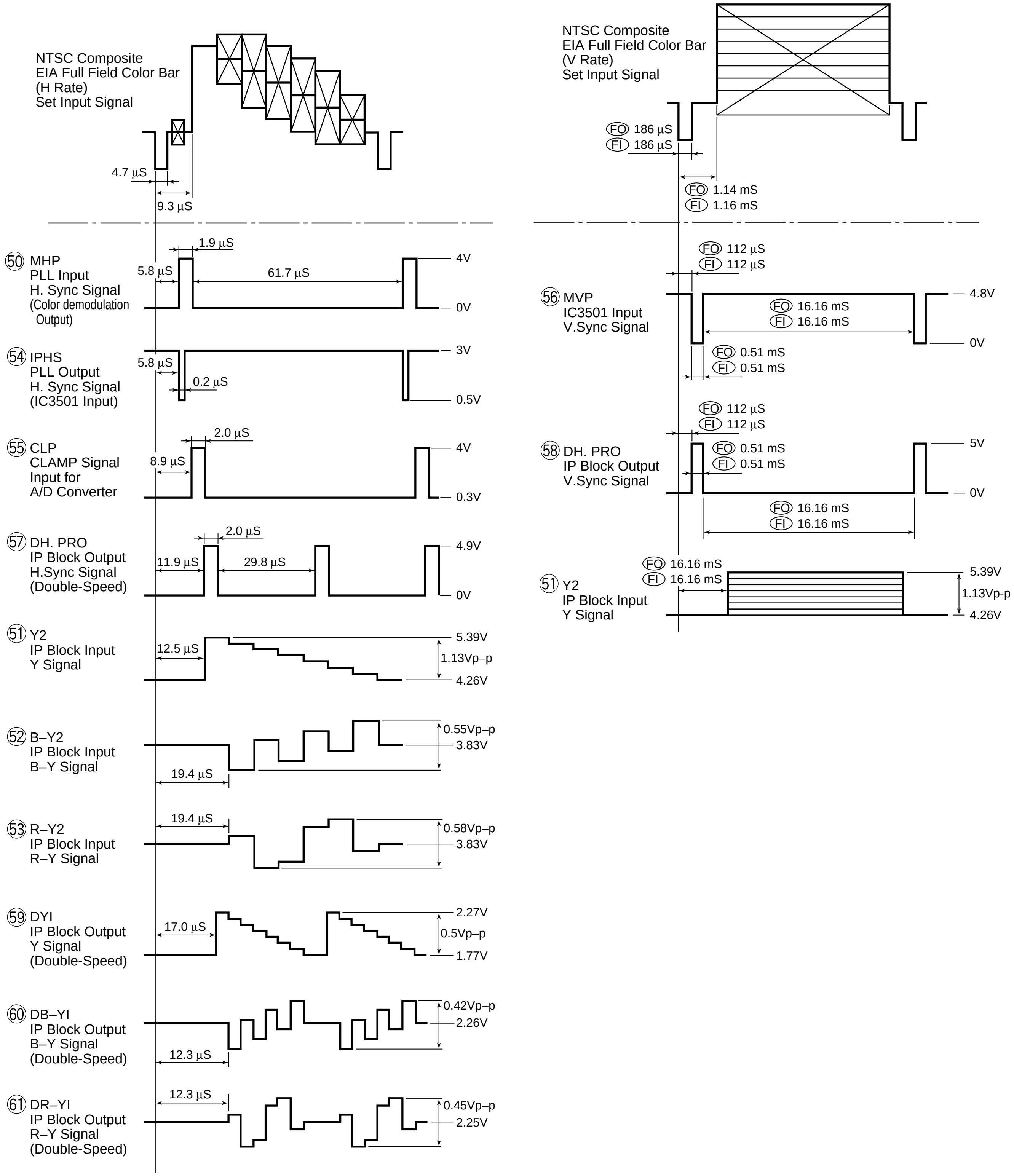


㊿ **Foot of R3270 (MHP)**
V: 2V/div. H: 10µsec/div.
(54) **Foot of R3256 (IPHS)**
V: 1V/div. H: 10µsec/div.



(51) **Foot of R3247 (Y2)**
V: 1V/div. H: 2msec/div.
(58) **Foot of R3535 (DV_PRO)**
V: 2V/div. H: 2msec/div.

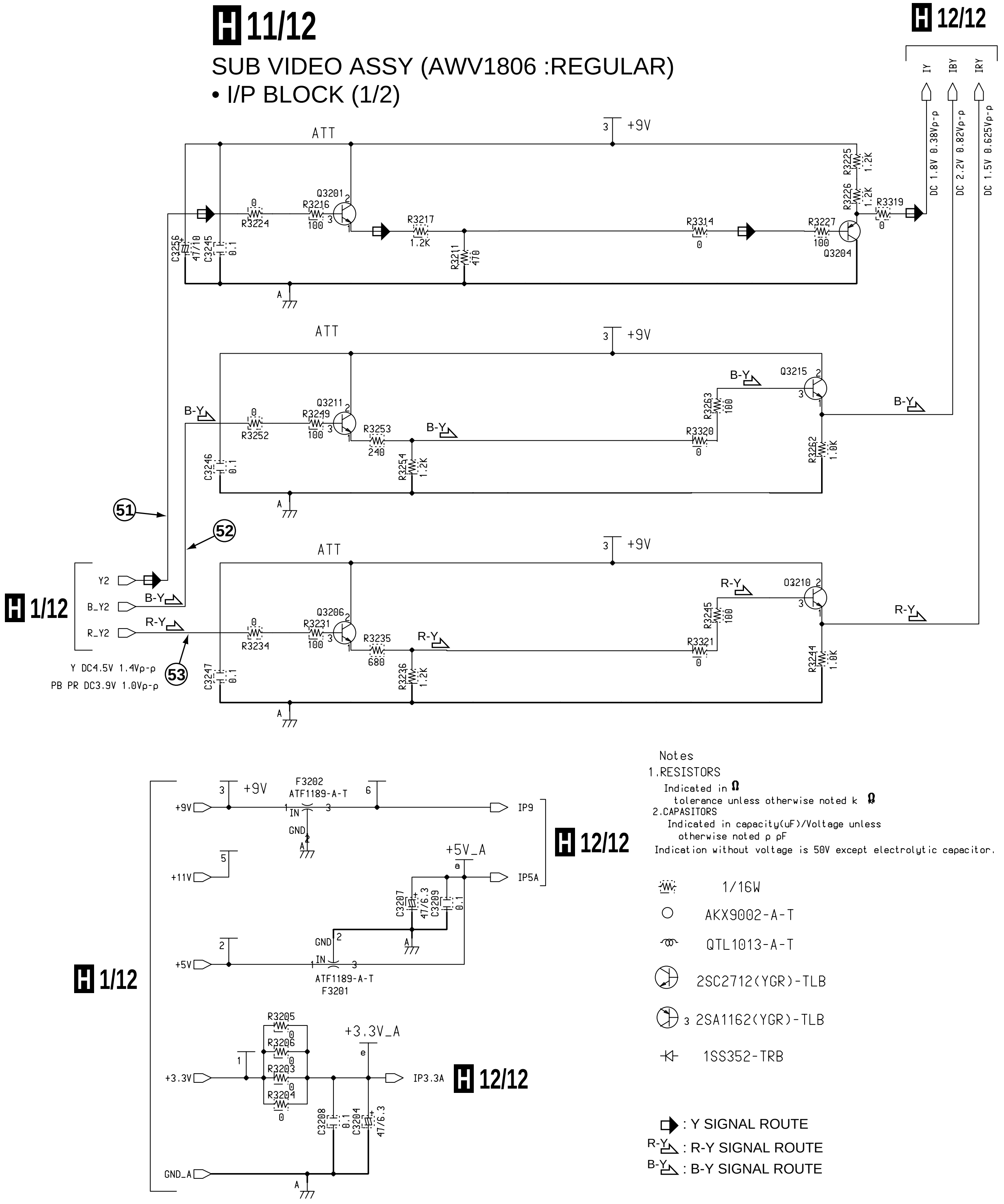



NTSC Composite
EIA Full Field Color Bar
(H Rate)
Set Input Signal
4.7 µS
9.3 µS
NTSC Composite
EIA Full Field Color Bar
(V Rate)
Set Input Signal
FO 186 µS
FI 186 µS
FO 1.14 mS
FI 1.16 mS
㊿ MHP
PLL Input
H. Sync Signal
(Color demodulation
Output)
1.9 µS
5.8 µS
61.7 µS
4V
0V
(54) IPHS
PLL Output
H. Sync Signal
(IC3501 Input)
5.8 µS
0.2 µS
3V
0.5V
(55) CLP
CLAMP Signal
Input for
A/D Converter
2.0 µS
8.9 µS
4V
0.3V
(57) DH. PRO
IP Block Output
H.Sync Signal
(Double-Speed)
2.0 µS
11.9 µS
29.8 µS
4.9V
0V
(51) Y2
IP Block Input
Y Signal
12.5 µS
5.39V
1.13Vp–p
4.26V
(52) B–Y2
IP Block Input
B–Y Signal
19.4 µS
0.55Vp–p
3.83V
(53) R–Y2
IP Block Input
R–Y Signal
19.4 µS
0.58Vp–p
3.83V
(59) DYI
IP Block Output
Y Signal
(Double-Speed)
17.0 µS
2.27V
0.5Vp–p
1.77V
(60) DB–YI
IP Block Output
B–Y Signal
(Double-Speed)
12.3 µS
0.42Vp–p
2.26V
(61) DR–YI
IP Block Output
R–Y Signal
(Double-Speed)
12.3 µS
0.45Vp–p
2.25V
FO 112 µS
FI 112 µS
(56) MVP
IC3501 Input
V.Sync Signal
FO 16.16 mS
FI 16.16 mS
4.8V
0V
FO 0.51 mS
FI 0.51 mS
FO 112 µS
FI 112 µS
(58) DH. PRO
IP Block Output
V.Sync Signal
FO 0.51 mS
FI 0.51 mS
5V
0V
FO 16.16 mS
FI 16.16 mS
FO 16.16 mS
FI 16.16 mS
(51) Y2
IP Block Input
Y Signal
5.39V
1.13Vp-p
4.26V

3.27 SUB VIDEO ASSY (11/12) (REGULAR ONLY)

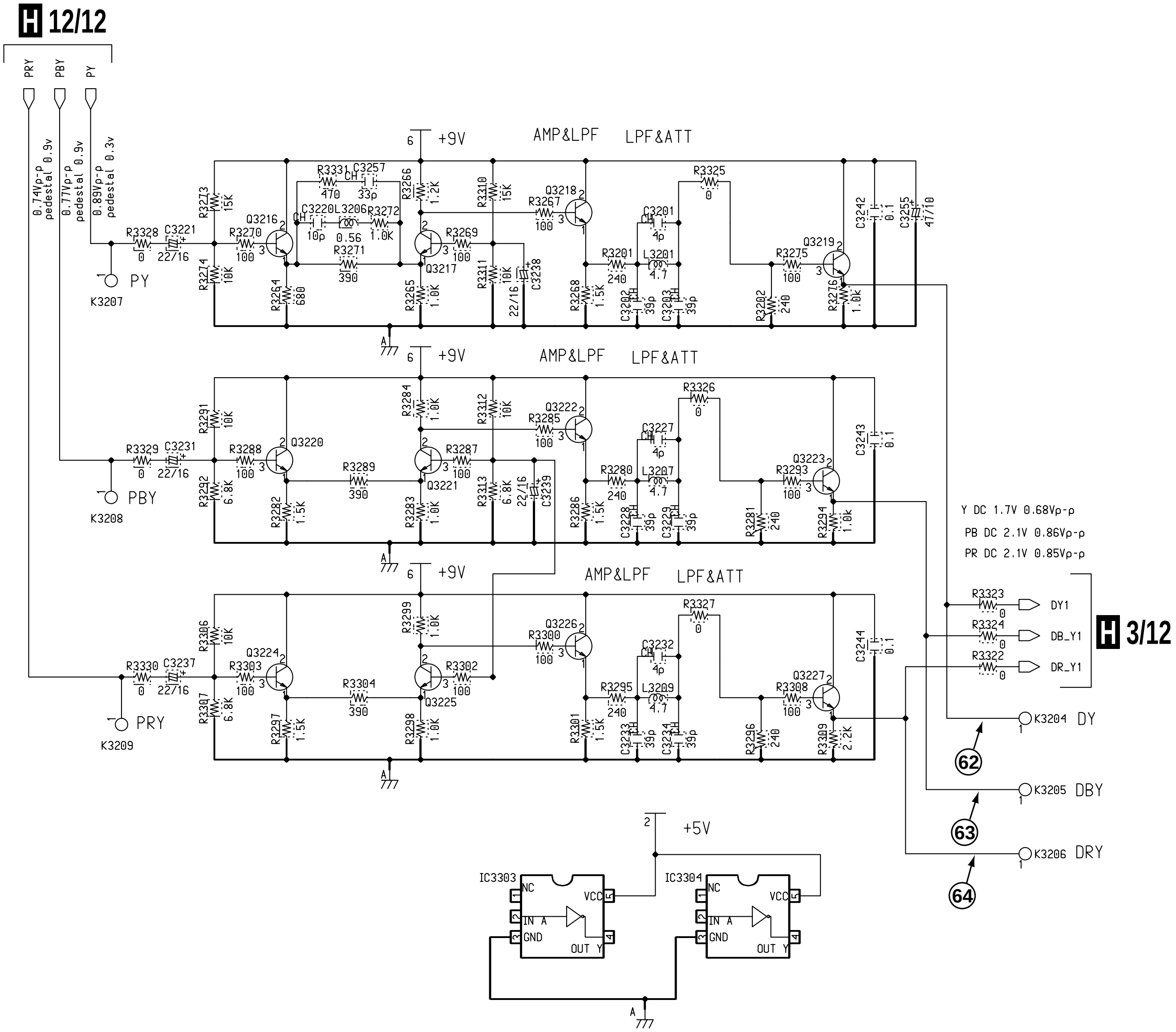
H 11/12

SUB VIDEO ASSY (AWV1806 :REGULAR)
• I/P BLOCK (1/2)

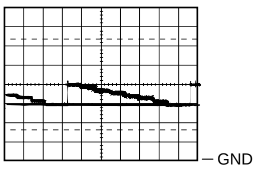

H 12/12
IY
IBY
IRY
DC 1.8V 0.38Vp-p
DC 2.2V 0.82Vp-p
DC 1.5V 0.625Vp-p
ATT
+9V
Q3201
R3216 100
R3224 0
R3217 1.2K
R3211 470
R3314 0
R3227 100
Q3204
R3225 1.2K
R3226 1.2K
R3319 0
C3256 47/10
C3245 0.1
A
Q3211
R3249 100
R3252 0
R3253 240
R3254 1.2K
R3320 0
R3263 100
Q3215
R3262 1.0K
C3246 0.1
B-Y
Q3206
R3231 100
R3234 0
R3235 680
R3236 1.2K
R3321 0
R3245 100
Q3210
R3244 1.0K
C3247 0.1
R-Y
51
52
53
H 1/12
Y2
B_Y2
R_Y2
Y DC4.5V 1.4Vp-p
PB PR DC3.9V 1.0Vp-p
+9V
F3202
ATF1189-A-T
IN
GND
IP9
+11V
+5V_A
IP5A
C3207 47/6.3
C3209 0.1
+5V
F3201
ATF1189-A-T
+3.3V
R3205 0
R3206 0
R3203 0
R3204 0
+3.3V_A
IP3.3A
C3208 0.1
C3204 47/6.3
GND_A
1/16W
AKX9002-A-T
QTL1013-A-T
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS352-TRB

Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k Ω
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless
otherwise noted p pF
Indication without voltage is 50V except electrolytic capacitor.

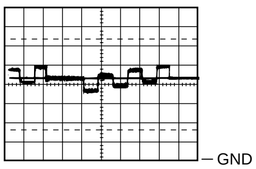
: Y SIGNAL ROUTE
R-Y : R-Y SIGNAL ROUTE
B-Y : B-Y SIGNAL ROUTE


H 12/12
PRY
PBY
PY
0.74Vp-p pedestal 0.9v
0.77Vp-p pedestal 0.9v
0.89Vp-p pedestal 0.3v
+9V
AMP&LPF
LPF&ATT
R3328 0
C3221 22/16
K3207 PY
R3273 15K
R3274 10K
R3270 100
Q3216
R3264 680
R3331 470
C3257 33p
C3220 10p
L3206 0.56
R3272 1.0K
R3271 390
R3266 1.2K
Q3217
R3269 100
R3265 1.0K
R3310 15K
R3311 10K
C3238 22/16
Q3218
R3267 100
R3268 1.5K
R3201 240
C3201 4p
L3201 4.7
C3202 39p
C3203 39p
R3325 0
R3275 100
Q3219
R3202 240
R3276 1.0k
C3242 0.1
C3255 47/10
R3329 0
C3231 22/16
K3208 PBY
R3291 10K
R3292 6.8K
R3288 100
Q3220
R3282 1.5K
R3289 390
R3284 1.0K
Q3221
R3287 100
R3283 1.0K
R3312 10K
R3313 6.8K
C3239 22/16
Q3222
R3285 100
R3286 1.5K
R3280 240
C3227 4p
L3207 4.7
C3228 39p
C3229 39p
R3326 0
R3293 100
Q3223
R3281 240
R3294 1.0k
C3243 0.1
R3330 0
C3237 22/16
K3209 PRY
R3306 10K
R3307 6.8K
R3303 100
Q3224
R3297 1.5K
R3304 390
R3299 1.0K
Q3225
R3302 100
R3298 1.0K
Q3226
R3300 100
R3301 1.5K
R3295 240
C3232 4p
L3209 4.7
C3233 39p
C3234 39p
R3327 0
R3308 100
Q3227
R3296 240
R3309 2.2K
C3244 0.1
Y DC 1.7V 0.68Vp-p
PB DC 2.1V 0.86Vp-p
PR DC 2.1V 0.85Vp-p
R3323 0
DY1
R3324 0
DB_Y1
R3322 0
DR_Y1
H 3/12
K3204 DY
K3205 DBY
K3206 DRY
62
63
64
+5V
IC3303
IC3304
NC
VCC
IN A
GND
OUT Y
A

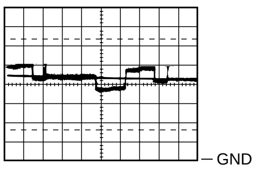
62 **K3204 (DY)**
V: 0.5V/div. H: 1μsec/div.



63 **K3205 (DB-Y1)**
V: 0.5V/div. H: 1μsec/div.



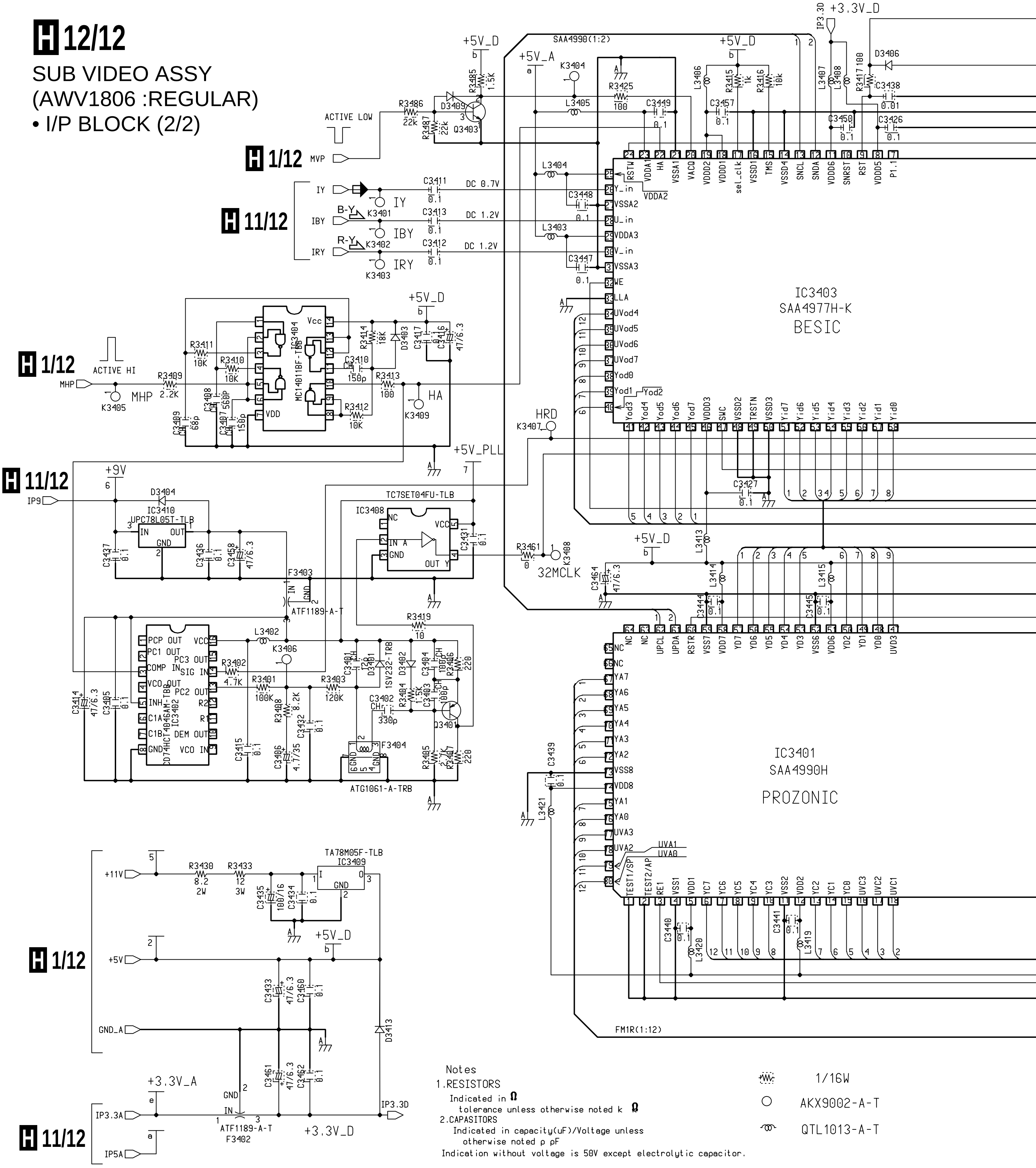
64 **K3206 (DR-Y1)**
V: 0.5V/div. H: 1μsec/div.



3.28 SUB VIDEO ASSY (12/12) (REGULAR ONLY)

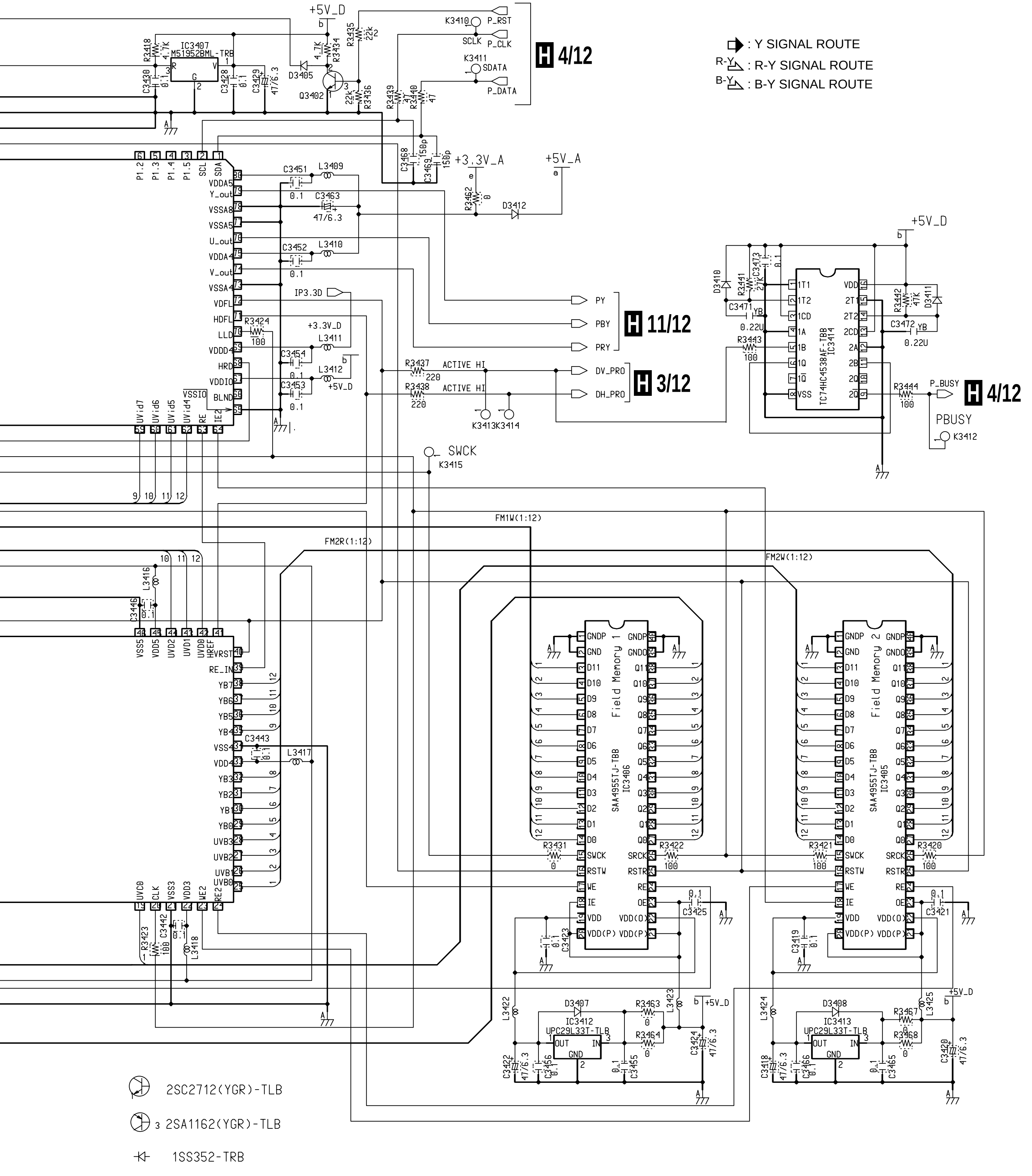
H 12/12

SUB VIDEO ASSY
(AWV1806 :REGULAR)
• I/P BLOCK (2/2)

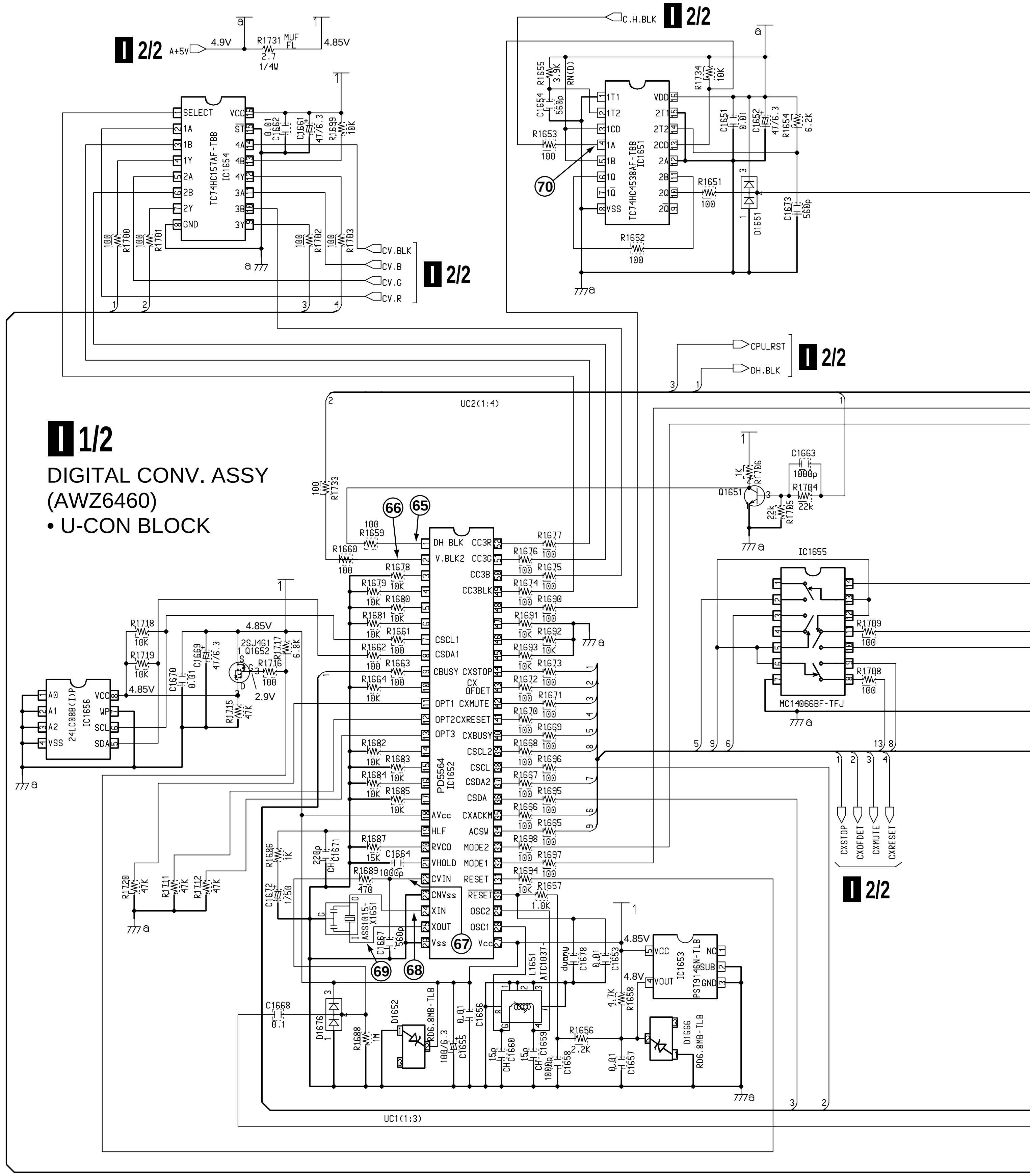

A
B
C
D
H 1/12
MVP
ACTIVE LOW
H 11/12
IY
IBY
IRY
B-Y
R-Y
K3401
K3402
K3403
DC 0.7V
DC 1.2V
H 1/12
MHP
ACTIVE HI
K3405
HA
K3409
IC3404
MC14011BF-TBB
H 11/12
IP9
+9V
D3404
IC3410
UPC78L05T-TLB
F3403
ATF1189-A-T
IC3408
TC7SET04FU-TLB
+5V_PLL
IC3402
CD74HCT4046AM-TBB
L3402
K3406
F3404
ATG1061-A-TRB
Q3401
Q3403
D3409
HRD
K3407
K3408
32MCLK
+5V_D
+5V_A
+3.3V_D
IP3.3D
K3404
SAA4990(1:2)
IC3403
SAA4977H-K
BESIC
IC3401
SAA4990H
PROZONIC
FM1R(1:12)
UVA1
UVA0
+11V
+5V
GND_A
H 1/12
TA78M05F-TLB
IC3409
D3413
+3.3V_A
IP3.3A
IP5A
ATF1189-A-T
F3402
H 11/12

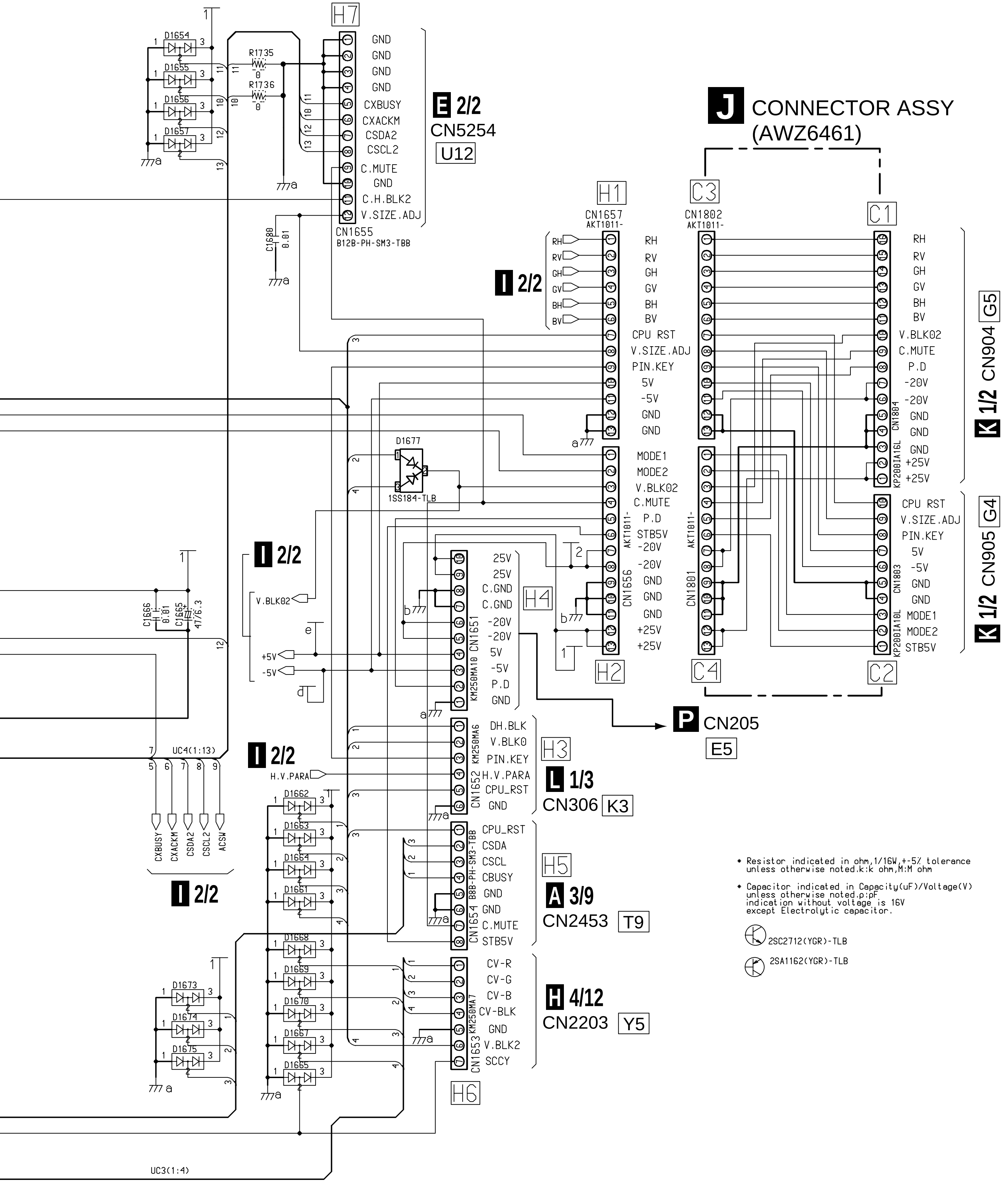
Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k Ω
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless
otherwise noted p pF
Indication without voltage is 50V except electrolytic capacitor.

1/16W
○ AKX9002-A-T
QTL1013-A-T


: Y SIGNAL ROUTE
R-Y : R-Y SIGNAL ROUTE
B-Y : B-Y SIGNAL ROUTE
+5V_D
K3410 P_RST
SCLK P_CLK
K3411 SDATA
P_DATA
H 4/12
IC3407 M51952BML-TRB
R3418 4.7K
C3430 0.1
C3428 0.1
C3429 47/6.3
D3405
Q3402
R3434 4.7K
R3435 22k
R3436 22k
R3439 47
R3440 47
C3468 150p
C3469 150p
+3.3V_A
+5V_A
R3462 0
D3412
P1.2 P1.3 P1.4 P1.5 SCL SDA
VDDA5 Y_out VSSA8 VSSA5 U_out VDDA4 V_out VSSA4 VDFL HDFL LLD VDDD4 HRD VDDIO BLND VSSIO
C3451 0.1 L3409
C3463 47/6.3
C3452 0.1 L3410
IP3.3D
R3424 100
+3.3V_D L3411
C3454 0.1
L3412 +5V_D
C3453 0.1
PY
PBY
PRY
H 11/12
R3437 220 ACTIVE HI
R3438 220 ACTIVE HI
DV_PRO
DH_PRO
H 3/12
K3413 K3414
UVid7 UVid6 UVid5 UVid4 RE IE2
SWCK K3415
FM1W(1:12)
FM2R(1:12)
FM2W(1:12)
+5V_D
IC3414 TC74HC4538AF-TBB
1T1 1T2 1CD 1A 1B 1Q 1Q VSS
VDD 2T1 2T2 2CD 2A 2B 2Q 2Q
D3410
R3441 27K
C3473 0.1
C3471 YB 0.22U
R3443 100
R3442 47K
D3411
C3472 YB 0.22U
R3444 100
P_BUSY
H 4/12
PBUSY K3412
L3416
C3446 0.1
VSS5 VDD5 UVD2 UVD1 VDDO HREF
VRST RE_IN YB7 YB6 YB5 YB4 VSS4 VDD4 YB3 YB2 YB1 YB0 UVB3 UVB2 UVB1 UVB0
C3443 0.1
L3417
UVC0 CLK VSS3 VDD3 WE2 RE2
R3423 100
C3442 0.1
L3418
Field Memory 1
SAA4955TJ-TBB IC3406
GNDP GND D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1 D0 SWCK RSTW WE IE VDD VDD(P)
GNDP GNDO Q11 Q10 Q9 Q8 Q7 Q6 Q5 Q4 Q3 Q2 Q1 Q0 SRCK RSTR RE OE VDD(O) VDD(P)
R3431 0
R3422 100
C3425 0.1
C3423 0.1
Field Memory 2
SAA4955TJ-TBB IC3405
R3421 100
R3420 100
C3421 0.1
C3419 0.1
L3422 D3407 IC3412 UPC29L33T-TLB OUT IN GND
R3463 0
R3464 0
L3423
C3424 47/6.3
C3422 47/6.3
C3456 0.1
C3455 0.1
L3424 D3408 IC3413 UPC29L33T-TLB
R3467 0
R3468 0
L3425
C3420 47/6.3
C3418 47/6.3
C3466 0.1
C3465 0.1
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
1SS352-TRB
A B C D

3.29 DIGITAL CONV. (1/2) and CONNECTOR ASSYS


I 1/2
DIGITAL CONV. ASSY
(AWZ6460)
• U-CON BLOCK
I 2/2
A+5V
4.9V
R1731 MUF FL 2.7 1/4W
4.85V
TC74HC157AF-TBB
IC1654
SELECT
VCC
CV.BLK
CV.B
CV.G
CV.R
C.H.BLK
TC74HC4538AF-TBB
IC1651
R1655 3.9K
RN(D)
R1734 10K
C1654 560p
R1653 100
C1651 0.01
C1652 47/6.3
R1654 6.2K
R1651 100
R1652 100
D1651
C1673 560p
CPU_RST
DH.BLK
UC2(1:4)
R1733 100
C1663 1000p
R1706 1K
Q1651
R1704 22k
R1705 22k
IC1655
MC14066BF-TFJ
R1709 100
R1708 100
PD5564
IC1652
DH BLK
V.BLK2
CSCL1
CSDA1
CBUSY
OPT1
OPT2
OPT3
AVcc
HLF
RVCO
VHOLD
CVIN
CNVss
XIN
XOUT
Vss
CC3R
CC3G
CC3B
CC3BLK
CXSTOP
CX OFDET
CXMUTE
CXRESET
CXBUSY
CSCL2
CSCL
CSDA2
CSDA
CXACKM
ACSW
MODE2
MODE1
RESET
OSC2
OSC1
Vcc
24LC08B(I)P
IC1656
A0
A1
A2
VSS
VCC
WP
SCL
SDA
2SJ461
Q1652
4.85V
2.9V
R1717 6.8K
R1716 100
R1715 47K
R1720 47K
R1711 47K
R1712 47K
ASS1015-
X1651
C1667 560p
L1651
ATC1037-
IC1653
PST9146N-TLB
4.85V
4.8V
VOUT
NC
SUB
GND
D1652
RD6.8MB-TLB
D1666
RD6.8MB-TLB
D1676
C1668 0.1
R1688 1M
C1655 100/6.3
C1656 0.01
C1660 15p
C1659 15p
C1658 1000p
R1656 2.2K
C1657 0.01
R1658 4.7K
C1653 0.01
C1678 dummy
CXSTOP
CXOFDET
CXMUTE
CXRESET
UC1(1:3)
65
66
67
68
69
70
A
B
C
D
1
2
3
4

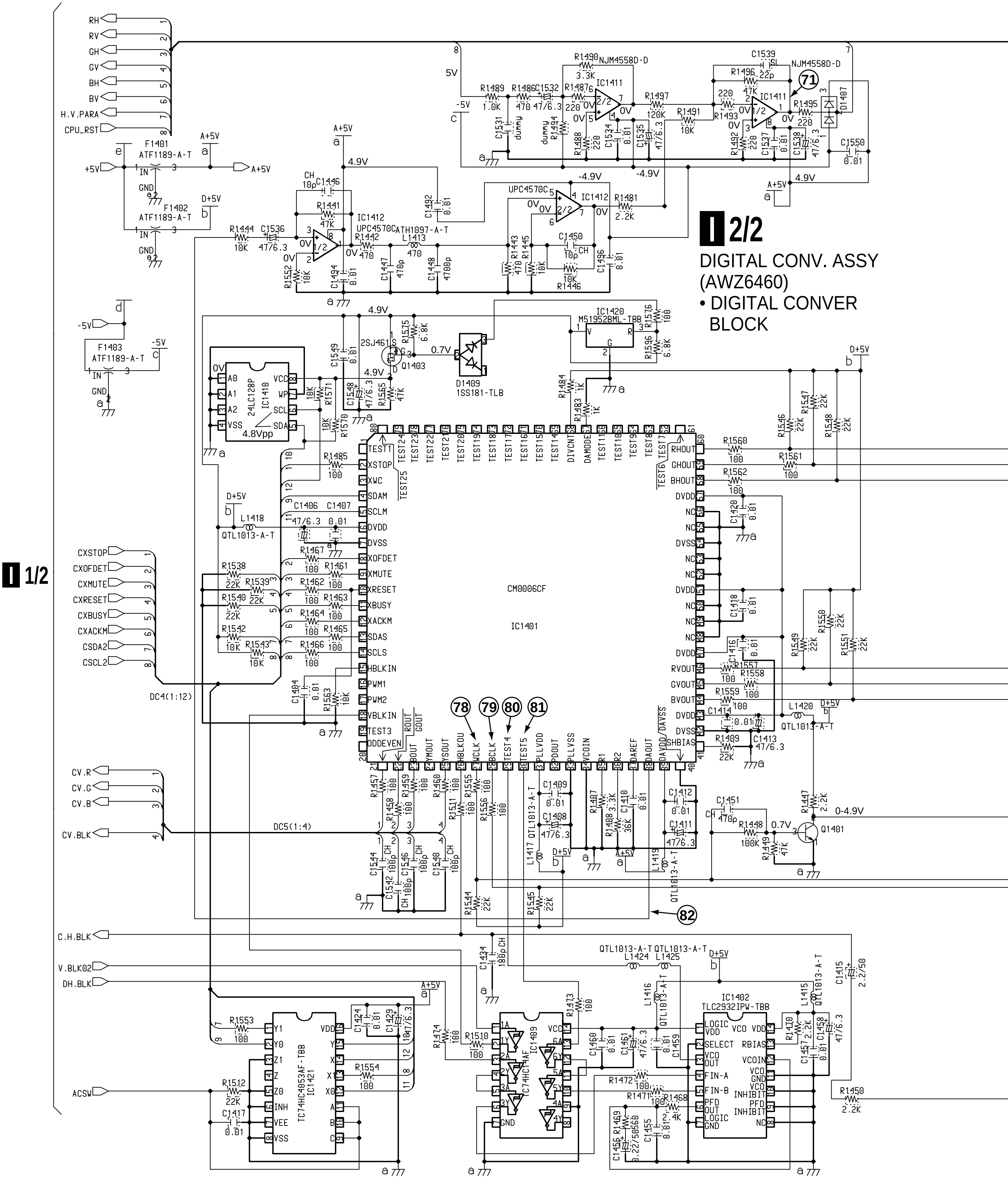


J CONNECTOR ASSY
(AWZ6461)
H7
CN1655
B12B-PH-SM3-TBB
GND
GND
GND
GND
CXBUSY
CXACKM
CSDA2
CSCL2
C.MUTE
GND
C.H.BLK2
V.SIZE.ADJ
E 2/2
CN5254
U12
D1654
D1655
D1656
D1657
R1735
0
R1736
0
C1680
0.01
H1
CN1657
AKT1011-
RH
RV
GH
GV
BH
BV
CPU RST
V.SIZE.ADJ
PIN.KEY
5V
-5V
GND
GND
I 2/2
C3
CN1802
AKT1011-
C1
CN1804
KP200IA16L
RH
RV
GH
GV
BH
BV
V.BLK02
C.MUTE
P.D
-20V
-20V
GND
GND
GND
+25V
+25V
K 1/2 CN904 G5
D1677
1SS184-TLB
CN1656
AKT1011-
MODE1
MODE2
V.BLK02
C.MUTE
P.D
STB5V
-20V
-20V
GND
GND
GND
+25V
+25V
H2
CN1801
AKT1011-
C4
CN1803
KP200IA10L
CPU RST
V.SIZE.ADJ
PIN.KEY
5V
-5V
GND
GND
MODE1
MODE2
STB5V
C2
K 1/2 CN905 G4
I 2/2
V.BLK02
+5V
-5V
C1666
0.01
C1665
47/6.3
CN1651
KM250MA10
25V
25V
C.GND
C.GND
-20V
-20V
5V
-5V
P.D
GND
H4
P CN205
E5
UC4(1:13)
CXBUSY
CXACKM
CSDA2
CSCL2
ACSW
I 2/2
I 2/2
H.V.PARA
D1662
D1663
D1664
D1661
CN1652
KM250MA6
DH.BLK
V.BLK0
PIN.KEY
H.V.PARA
CPU_RST
GND
H3
L 1/3
CN306 K3
CN1654
B8B-PH-SM3-TBB
CPU_RST
CSDA
CSCL
CBUSY
GND
GND
C.MUTE
STB5V
H5
A 3/9
CN2453 T9
D1668
D1669
D1670
D1667
D1665
D1673
D1674
D1675
CN1653
KM250MA7
CV-R
CV-G
CV-B
CV-BLK
GND
V.BLK2
SCCY
H6
H 4/12
CN2203 Y5
UC3(1:4)
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB

* Resistor indicated in ohm,1/16W,+-5% tolerance unless otherwise noted.k:k ohm,M:M ohm

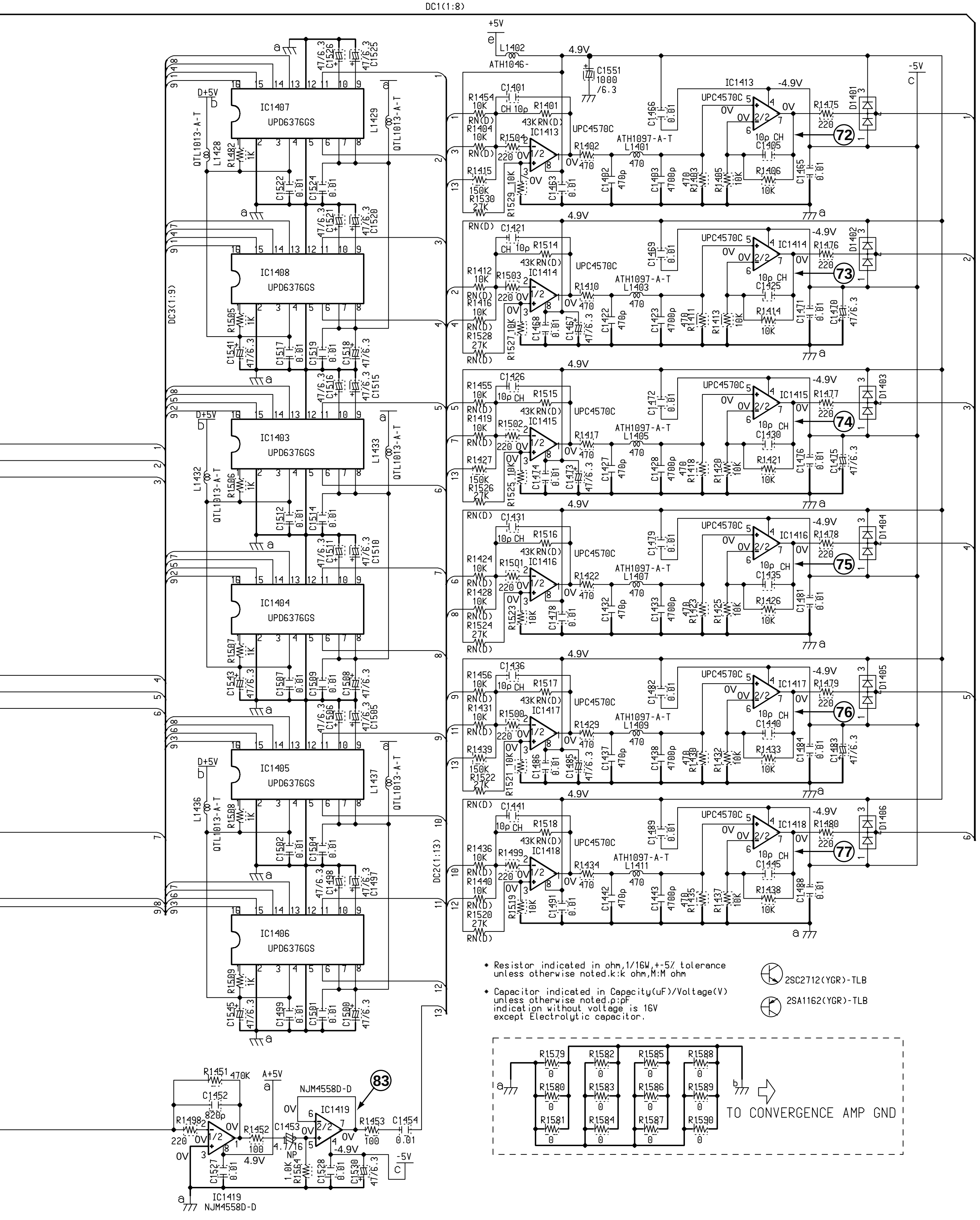
* Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 16V except Electrolytic capacitor.

3.30 DIGITAL CONV. ASSY (2/2)


RH
RV
GH
GV
BH
BV
H.V.PARA
CPU_RST
+5V
F1401
ATF1189-A-T
A+5V
F1402
D+5V
-5V
F1403
1/2
CXSTOP
CXOFDET
CXMUTE
CXRESET
CXBUSY
CXACKM
CSDA2
CSCL2
DC4(1:12)
CV.R
CV.G
CV.B
CV.BLK
DC5(1:4)
C.H.BLK
V.BLK02
DH.BLK
ACSW
IC1411 NJM4558D-D
IC1412 UPC4570C
L1413 ATH1097-A-T
IC1410 24LC128P
4.8Vpp
Q1403 2SJ461
D1409 1SS181-TLB
IC1420 M51952BML-TBB
D1407
71
4.9V
-4.9V
0.7V
IC1401 CM0006CF
TEST1
XSTOP
XWC
SDAM
SCLM
DVDD
DVSS
XOFDET
XMUTE
XRESET
XBUSY
XACKM
SDAS
SCLS
HBLKIN
PWM1
PWM2
VBLKIN
TEST3
ODDEVEN
RHOUT
GHOUT
BHOUT
RVOUT
GVOUT
BVOUT
SHBIAS
DIVCNT
DAMODE
78
79
80
81
82
WCLK
BCLK
TEST4
TEST5
PLLVDD
PDOUT
PLLVSS
VCOIN
DAREF
DAOUT
Q1401
0-4.9V
L1420 QTL1013-A-T
L1418 QTL1013-A-T
L1424 QTL1013-A-T
L1425 QTL1013-A-T
IC1421 TC74HC4053AF-TBB
IC1409 TC74HC14AF
IC1402 TLC2932IPW-TBB
LOGIC VDD
SELECT
VCO OUT
FIN-A
FIN-B
PFD OUT
LOGIC GND
VCO VDD
RBIAS
VCOIN
VCO GND
INHIBIT
PFD INHIBIT
NC

2/2

DIGITAL CONV. ASSY
(AWZ6460)
- DIGITAL CONVER
  BLOCK

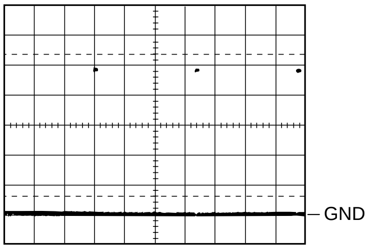

DC1(1:8)
DC3(1:9)
DC2(1:13)
+5V
D+5V
A+5V
-5V
4.9V
-4.9V
L1402
ATH1046-
C1551
1000
/6.3
IC1407
IC1408
IC1403
IC1404
IC1405
IC1406
UPD6376GS
QTL1013-A-T
IC1413
IC1414
IC1415
IC1416
IC1417
IC1418
UPC4570C
ATH1097-A-T
D1401
D1402
D1403
D1404
D1405
D1406
72
73
74
75
76
77
83
IC1419
NJM4558D-D
2SC2712(YGR)-TLB
2SA1162(YGR)-TLB
R1579
R1580
R1581
R1582
R1583
R1584
R1585
R1586
R1587
R1588
R1589
R1590
TO CONVERGENCE AMP GND
A
B
C
D

- Resistor indicated in ohm,1/16W,+-5% tolerance unless otherwise noted.k:k ohm,M:M ohm
- Capacitor indicated in Capacity(uF)/Voltage(V) unless otherwise noted.p:pF indication without voltage is 16V except Electrolytic capacitor.

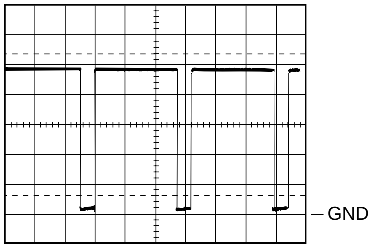
G DIGITAL CONV. ASSY

Input signal
Video signal : EIA full color-bar
Picture quality : Standard
Range :DC range (Unless otherwise noted)

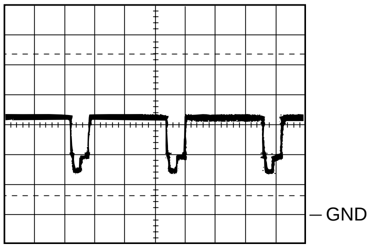
(65) IC1652 pin 1 (DH. BLK input)
V: 1V/div. H: 10µsec/div.



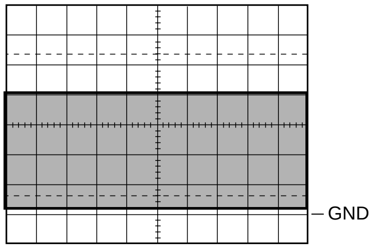
(66) IC1652 pin 2 (V. BLKØ input)
V: 1V/div. H: 5msec/div.



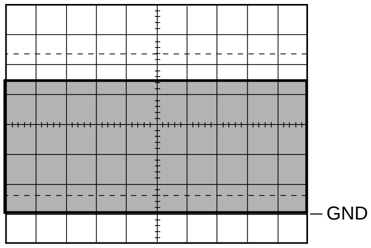
(67) IC1652 pin 22 (Y input)
V: 1V/div. H: 20µsec/div.



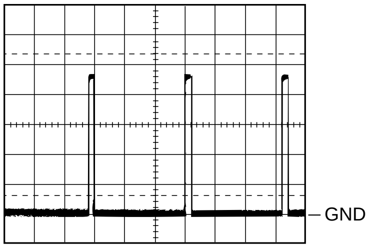
(68) IC1652 pin 24 (X input)
V: 1V/div. H: 100µsec/div.



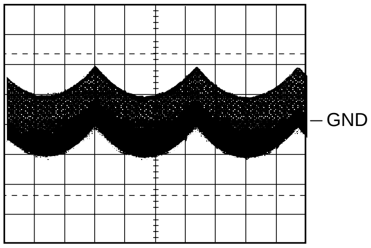
(69) IC1652 pin 25 (X output)
V: 1V/div. H: 100µsec/div.



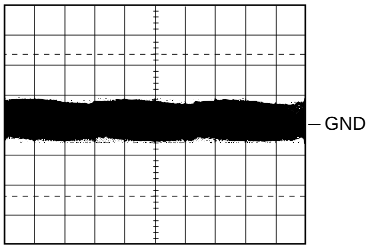
(70) IC1651 pin 4 (CH. BLK input)
V: 1V/div. H: 100µsec/div.



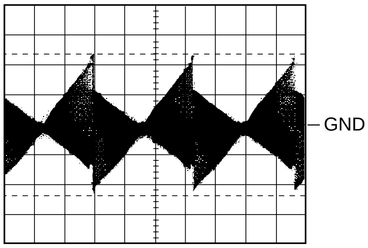
(71) IC1411 pin 1 (DF output)
V: 2V/div. H: 5msec/div.



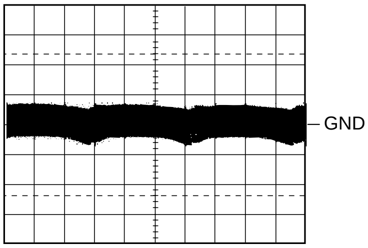
(72) IC1413 pin 7 (RH output)
V: 1V/div. H: 5msec/div.



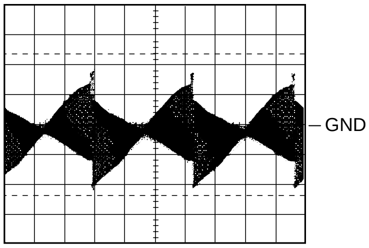
(73) IC1414 pin 7 (RV output)
V: 1V/div. H: 5msec/div.



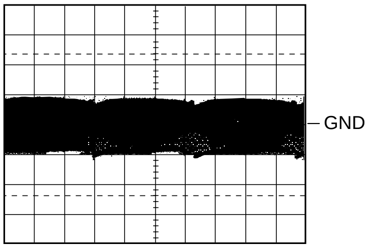
(74) IC1415 pin 7 (GH output)
V: 1V/div. H: 5msec/div.



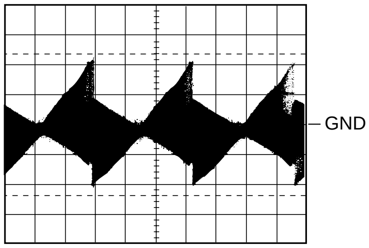
(75) IC1416 pin 7 (GV output)
V: 1V/div. H: 5msec/div.



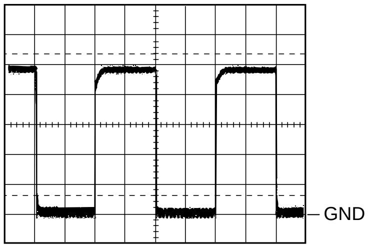
(76) IC1417 pin 7 (BH output)
V: 1V/div. H: 5msec/div.



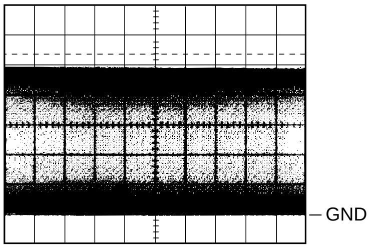
(77) IC1418 pin 7 (BV output)
V: 1V/div. H: 5msec/div.



(78) IC1401 pin 27 (WCLK for D/A)
V: 1V/div. H: 1µsec/div.

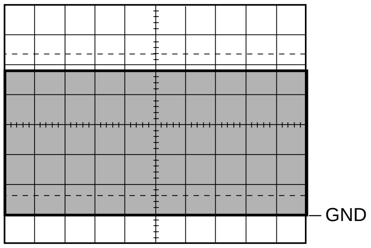


(79) IC1401 pin 28 (BCLK for D/A)
V: 1V/div. H: 1µsec/div.

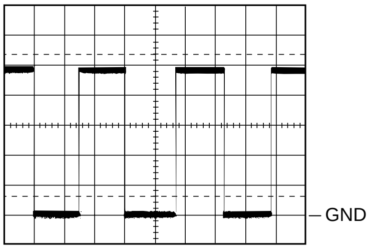


I 2/2 DIGITAL CONV. ASSY (2/2)

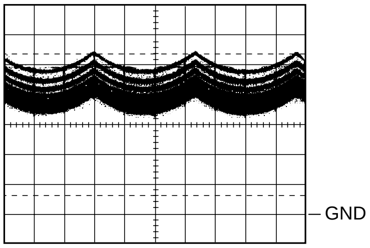
⑧⓪ **IC1401 pin 29 (PLL CLK (35MHz))**
V: 1V/div. H: 1µsec/div.



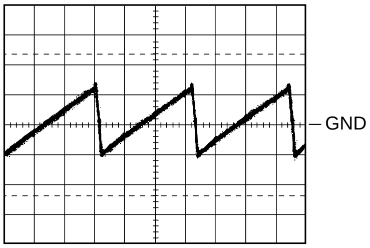
⑧① **IC1401 pin 30**
(Output after PLL division)
V: 1V/div. H: 1µsec/div.



⑧② **IC1401 pin 38 (DF output)**
V: 0.5V/div. H: 5msec/div.



⑧③ **IC1419 pin 7 (For H pulse cancel)**
V: 1V/div. H: 10µsec/div.



IC1401 (CM0006CF)

Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	4.9	21	0	41	1.2	61	4.9
2	4.85	22	0	42	0	62	4.9
3	0	23	0	43	4.9	63	4.9
4	4.8Vpp	24	0	44	4.9Vpp	64	4.9
5	4.8Vpp	25	0	45	4.9Vpp	65	4.9
6	4.9	26	4.6Vpp	46	4.9Vpp	66	4.9
7	0	27	4.8Vpp	47	4.9	67	0
8	4.85	28	4.8Vpp	48	0	68	4.8
9	4.8	29	4.8Vpp	49	0	69	4.9
10	4.8	30	4.8Vpp	50	0	70	4.9
11	4.8Vpp	31	4.9	51	4.9	71	4.9
12	4.8Vpp	32	0	52	0	72	4.9
13	4.8Vpp	33	0	53	0	73	4.9
14	4.8Vpp	34	0	54	0	74	4.9
15	0	35	1.2	55	0	75	4.9
16	2.4	36	0	56	0	76	4.9
17	2.4	37	3.2	57	4.9	77	4.9
18	4.9Vpp	38	1Vpp	58	4.9Vpp	78	4.9
19	4.9	39	4.9	59	4.9Vpp	79	4.9
20	4.9	40	0	60	4.9Vpp	80	4.9

IC1421
(TC74HC4053AF)

Pin No.	Voltage (V)
1	4.8Vpp
2	4.8Vpp
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	4.8Vpp
13	4.8Vpp
14	4.8Vpp
15	4.8Vpp
16	4.9

IC1403,IC1405,
IC1407
(UPD6376GS)

Pin No.	Voltage (V)
1	4.85
2	0
3	0
4	4.9
5	0
6	1.6
7	4.9
8	4.9
9	2.1
10	2.1
11	1.6
12	0
13	2.4
14	2.1
15	2.2
16	2.1

IC1409
(TC74HC14AF)

Pin No.	Voltage (V)
1	4.8Vpp
2	4.8Vpp
3	4.8Vpp
4	4.9Vpp
5	4.9Vpp
6	4.9Vpp
7	0
8	0
9	0
10	4.9Vpp
11	4.9Vpp
12	4.9Vpp
13	4.9Vpp
14	4.9

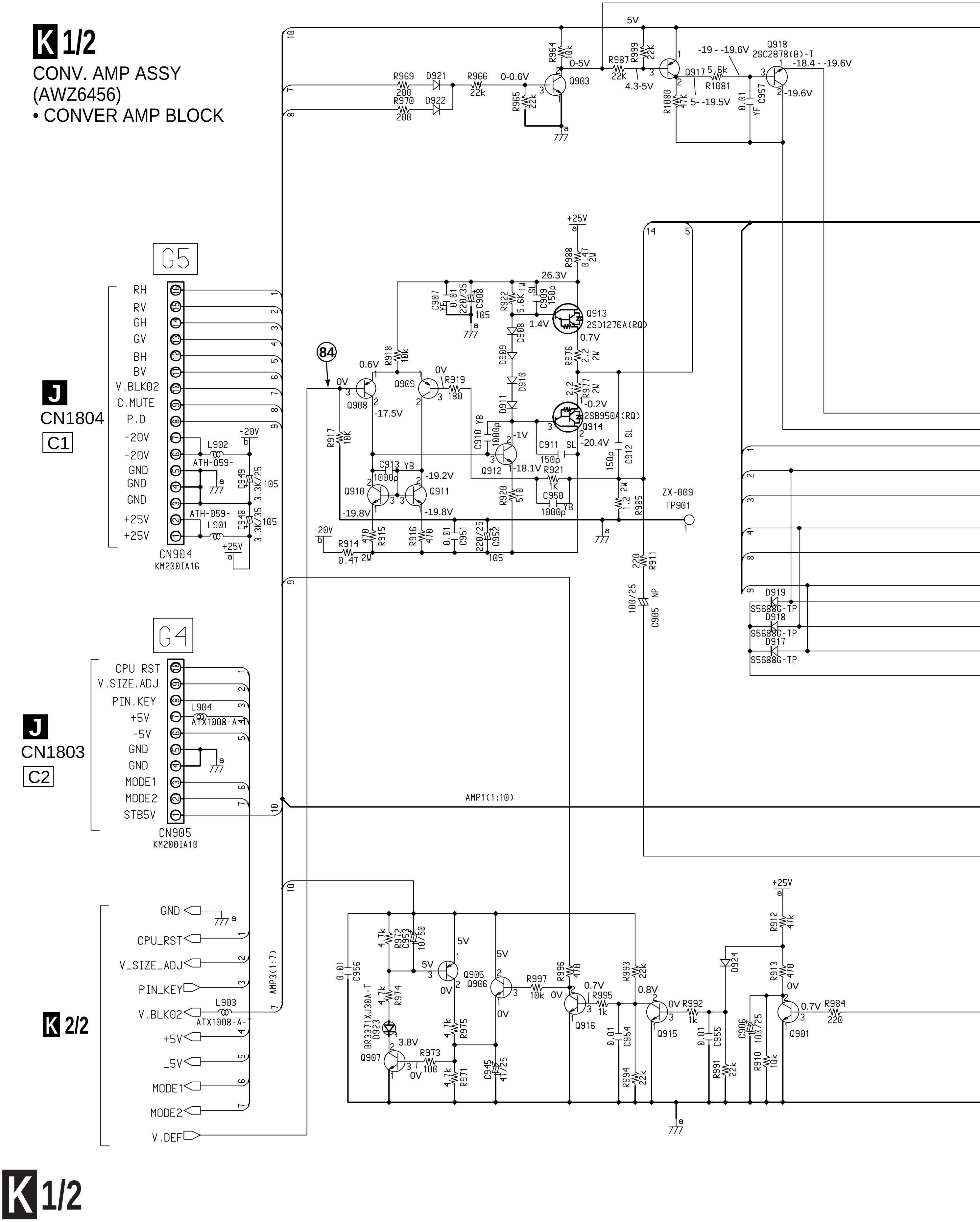
IC1402
(TLC2932IPW)

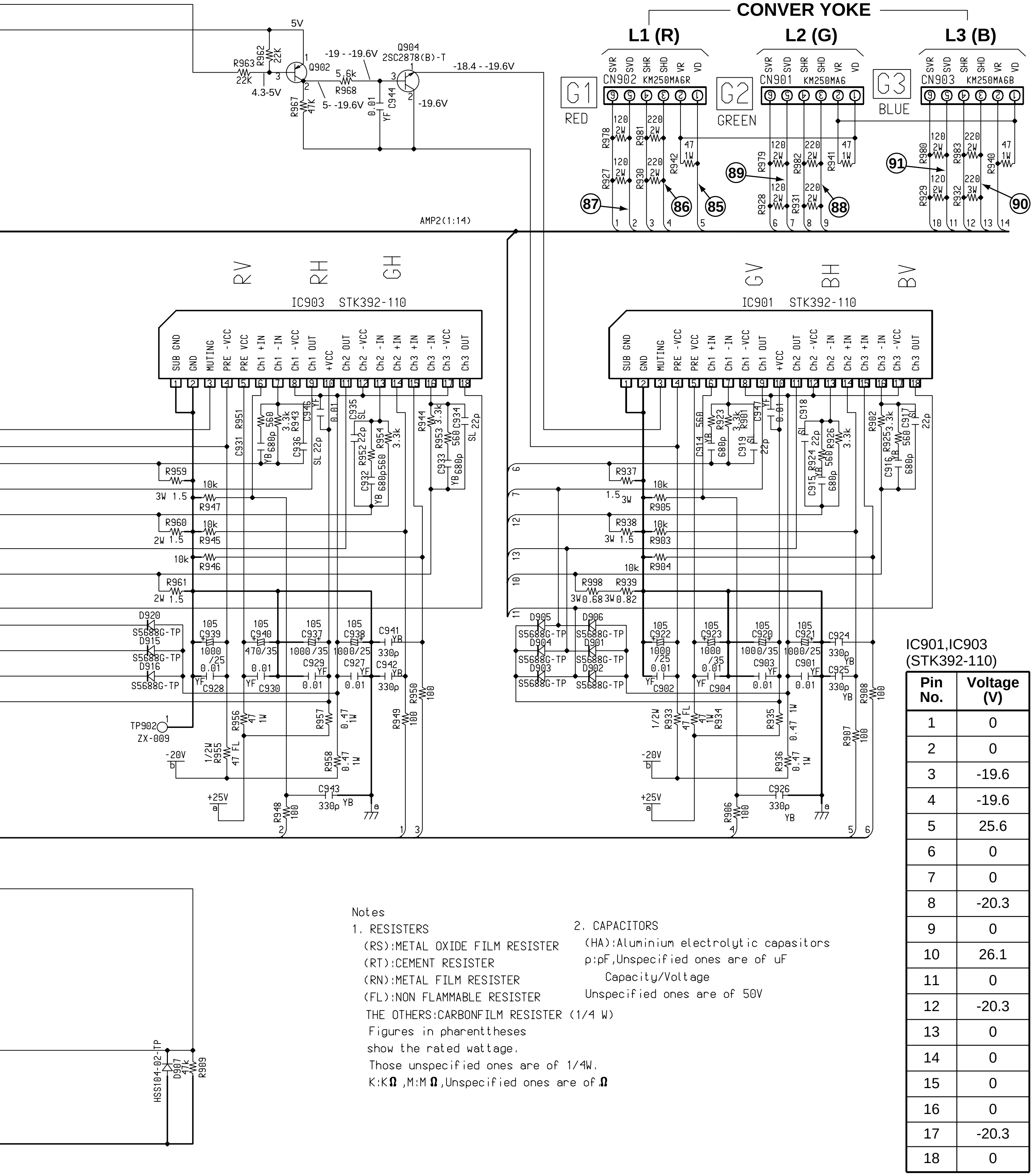
Pin No.	Voltage (V)
1	4.9
2	0
3	4.8Vpp
4	4.9Vpp
5	4.9Vpp
6	1.8
7	0
8	0
9	0
10	0
11	0
12	1.8
13	3.6
14	4.9

3.31 CONV. AMP ASSY (1/2)

K 1/2

CONV. AMP ASSY
(AWZ6456)
- CONVER AMP BLOCK


A
B
C
D
G5
J
CN1804
C1
RH
RV
GH
GV
BH
BV
V.BLK02
C.MUTE
P.D
-20V
-20V
GND
GND
GND
+25V
+25V
CN904
KM200IA16
L902
ATH-059-
L901
ATH-059-
C949 3.3K/25 105
C948 3.3K/35 105
G4
J
CN1803
C2
CPU RST
V.SIZE.ADJ
PIN.KEY
+5V
-5V
GND
GND
MODE1
MODE2
STB5V
CN905
KM200IA10
L904
ATX1008-A-T
K 2/2
GND
CPU_RST
V_SIZE_ADJ
PIN_KEY
V.BLK02
+5V
_5V
MODE1
MODE2
V.DEF
L903
ATX1008-A-T
AMP3(1:7)
AMP1(1:10)
5V
R969 200
R970 200
D921
D922
R966 22k
0-0.6V
R964 10k
0-5V
R965 22k
Q903
R987 22k
R999 22k
4.3-5V
Q917
R1080 47k
5- -19.5V
5.6k R1081
0.01 C957 YF
-19 - -19.6V
Q918
2SC2878(B)-T
-18.4 - -19.6V
-19.6V
+25V
R988 0.47 2W
26.3V
C907 YF 0.01
220/35 C908 105
R922 5.6K 1W
C909 SL 150p
Q913
2SD1276A(RQ)
1.4V
0.7V
D908
D909
D910
D911
R976 2.2 2W
R977 2.2 2W
-0.2V
2SB950A(RQ)
Q914
-20.4V
84
0V
0.6V
R918 10k
Q908
-17.5V
0V
Q909
R919 180
C910 YB 1000p
-1V
Q912
-18.1V
C911 SL 150p
R921 1k
C950 1000p YB
C912 SL 150p
R985 1.2 2W
ZX-009
TP901
R917 10k
C913 YB 1000p
-19.2V
Q910
Q911
-19.8V
-19.8V
-20V
R914 0.47 2W
R915 470
R916 470
0.01 C951
220/25 C952 105
R920 510
R911 220
100/25 C905 NP
14
5
D919
S5688G-TP
D918
S5688G-TP
D917
S5688G-TP
0.01 C956
4.7k R972
C953 10/50
5V
5V
Q905
Q906
0V
5V
0V
R974 4.7k
BR3371XJ30A-T D923
3.8V
Q907
R973 100
0V
R975 4.7k
R971 4.7k
C945 47/25
R997 10k
0V
R996 470
0.7V
R995 1k
Q916
R993 22k
0.8V
C954 0.01
R994 22k
0V R992 1k
Q915
C955 0.01
R991 22k
D924
C906 100/25
R910 10k
+25V
R912 47k
R913 470
0V
0.7V R984 220
Q901


CONVER YOKE
L1 (R)
L2 (G)
L3 (B)
SVR SVD SHR SHD VR VD
CN902 KM250MA6R
CN901 KM250MA6
CN903 KM250MA6B
G1
RED
G2
GREEN
G3
BLUE
R978 120 2W
R981 220 2W
R927 120 2W
R930 220 2W
R942 47 1W
R979 120 2W
R982 220 2W
R941 47 1W
R928 120 2W
R931 220 2W
R980 120 2W
R983 220 2W
R940 47 1W
R929 120 2W
R932 220 3W
85
86
87
88
89
90
91
AMP2(1:14)
5V
R962 22K
R963 22K
Q902
4.3-5V
R967 47K
-19 - -19.6V
5.6k
R968
5- -19.6V
C944 0.01 YF
Q904 2SC2878(B)-T
-18.4 - -19.6V
-19.6V
RV
RH
GH
GV
BH
BV
IC903 STK392-110
IC901 STK392-110
SUB GND
GND
MUTING
PRE -VCC
PRE VCC
Ch1 +IN
Ch1 -IN
Ch1 -VCC
Ch1 OUT
+VCC
Ch2 OUT
Ch2 -VCC
Ch2 -IN
Ch2 +IN
Ch3 +IN
Ch3 -IN
Ch3 -VCC
Ch3 OUT
R959
R947
R960
R945
R946
R961
R937
R905
R938
R903
R904
R998
R939
D920 S5688G-TP
D915 S5688G-TP
D916 S5688G-TP
D905 S5688G-TP
D906 S5688G-TP
D904 S5688G-TP
D901 S5688G-TP
D903 S5688G-TP
D902 S5688G-TP
TP902
ZX-009
-20V
+25V
C943 330p YB
C926 330p YB
D907 HSS104-02-TP
R909 47k

Notes

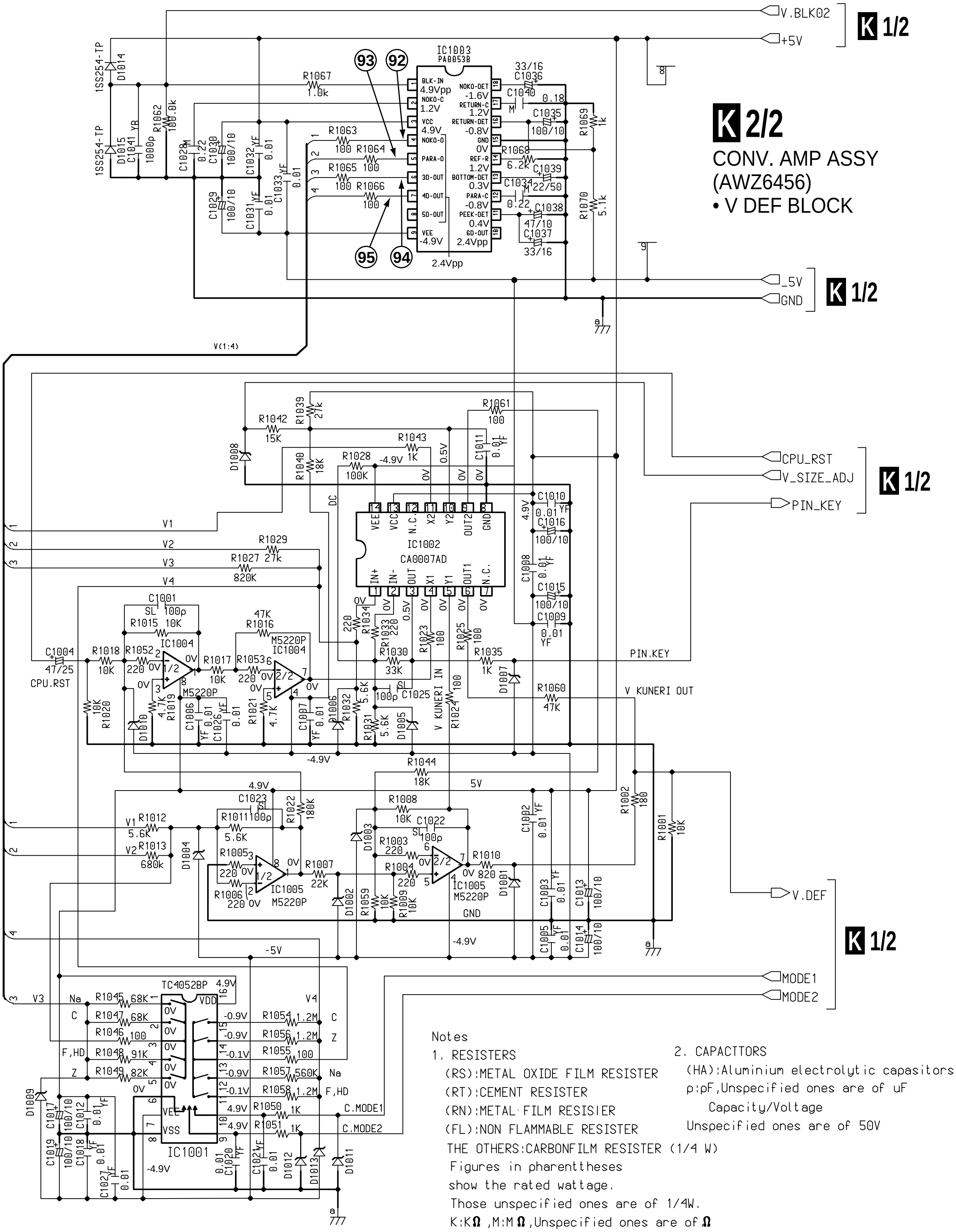
1. RESISTERS
   (RS):METAL OXIDE FILM RESISTER
   (RT):CEMENT RESISTER
   (RN):METAL FILM RESISTER
   (FL):NON FLAMMABLE RESISTER
   THE OTHERS:CARBONFILM RESISTER (1/4 W)
   Figures in pharentheses
   show the rated wattage.
   Those unspecified ones are of 1/4W.
   K:KΩ ,M:MΩ ,Unspecified ones are of Ω

2. CAPACITORS
   (HA):Aluminium electrolytic capasitors
   p:pF,Unspecified ones are of uF
   Capacity/Voltage
   Unspecified ones are of 50V

IC901,IC903
(STK392-110)

Pin No.	Voltage (V)
1	0
2	0
3	-19.6
4	-19.6
5	25.6
6	0
7	0
8	-20.3
9	0
10	26.1
11	0
12	-20.3
13	0
14	0
15	0
16	0
17	-20.3
18	0

3.32 CONV. AMP ASSY (2/2)


V.BLK02
+5V
K 1/2
IC1003
PA0053B
BLK-IN
NOKO-C
VCC
NOKO-O
PARA-O
3D-OUT
4D-OUT
5D-OUT
VEE
NOKO-DET
RETURN-C
RETURN-DET
GND
REF-R
BOTTOM-DET
PARA-C
PEEK-DET
6D-OUT
93
92
95
94
2.4Vpp
R1067 1.0k
R1062 100.0k
D1014 1SS254-TP
D1015 1SS254-TP
C1041 1000p
R1063 100
R1064 100
R1065 100
R1066 100
R1068 6.2k
R1069 1k
R1070 5.1k
C1035 100/10
C1036 33/16
C1037 33/16
C1038 47/10
C1039 22/50
C1040 0.18
C1034 0.22
_5V
GND
K 1/2
V(1:4)
CPU_RST
V_SIZE_ADJ
PIN_KEY
K 1/2
IC1002
CA0007AD
VEE
VCC
N.C.
X2
Y2
OUT2
GND
IN+
IN-
OUT
X1
Y1
OUT1
N.C.
R1039 27k
R1042 15K
R1043 1K
R1028 100K
R1040 18K
R1061 100
C1011 0.01
C1010 0.01
C1016 100/10
C1008 0.01
C1015 100/10
C1009 0.01
D1008
V1
V2
V3
V4
R1029 27k
R1027 820K
C1001 SL 100p
R1015 10K
IC1004 M5220P
R1016 47K
R1018 10K
R1052 220
R1017 10K
R1053 220
C1004 47/25
CPU.RST
R1020 10K
R1019 4.7K
R1021 4.7K
C1006 0.01
C1026 0.01
C1007 0.01
D1010
D1006
R1032 5.6K
R1031 5.6K
D1005
R1034 220
R1033 220
R1030 33K
C1025 100p
R1023 100
R1025 100
R1035 1K
D1007
R1024 100
V KUNERI IN
V KUNERI OUT
R1060 47K
PIN.KEY
-4.9V
R1044 18K
5V
4.9V
C1023 100p
R1011 5.6K
R1022 180K
R1012 5.6K
R1013 680k
D1004
R1005 220
R1006 220
IC1005 M5220P
R1007 22K
D1002
R1008 10K
C1022 SL 100p
D1003
R1003 220
R1004 220
R1059 10K
R1009 10K
R1010 820
D1001
C1002 0.01
C1003 0.01
C1013 100/10
C1005 0.01
C1014 100/10
R1002 180
R1001 10K
V.DEF
GND
-5V
K 1/2
MODE1
MODE2
TC4052BP
VDD
VEE
VSS
IC1001
R1045 68K
R1047 68K
R1046 100
R1048 91K
R1049 82K
R1054 1.2M
R1056 1.2M
R1055 100
R1057 560K
R1058 1.2M
R1050 1K
R1051 1K
C.MODE1
C.MODE2
Na
C
F,HD
Z
D1009
D1012
D1013
D1011
C1017 100/10
C1012 0.01
C1019 100/10
C1018 0.01
C1027 0.01
C1020 0.01
C1021 0.01

K 2/2
CONV. AMP ASSY
(AWZ6456)
- V DEF BLOCK

Notes

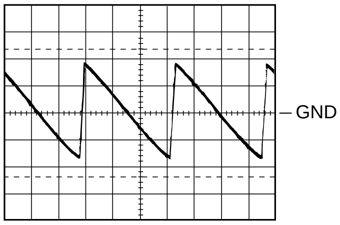
1. RESISTERS
(RS):METAL OXIDE FILM RESISTER
(RT):CEMENT RESISTER
(RN):METAL FILM RESISIER
(FL):NON FLAMMABLE RESISTER
THE OTHERS:CARBONFILM RESISTER (1/4 W)
Figures in pharentheses
show the rated wattage.
Those unspecified ones are of 1/4W.
K:KΩ ,M:MΩ,Unspecified ones are of Ω

2. CAPACTTORS
(HA):Aluminium electrolytic capasitors
p:pF,Unspecified ones are of uF
Capacity/Voltage
Unspecified ones are of 50V

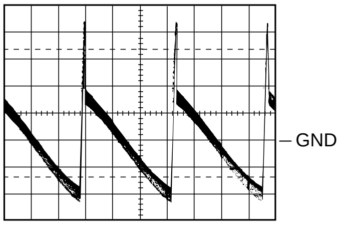
K CONV. AMP ASSY

Input signal
Video signal : EIA full color-bar
Picture quality : Standard
Range :DC range (Unless otherwise noted)

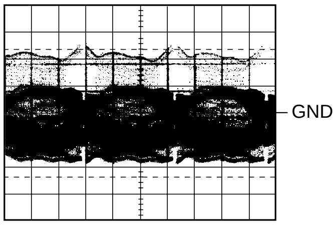
(84) Q908 Base (V. DEF input)
V: 0.5V/div. H: 5msec/div.



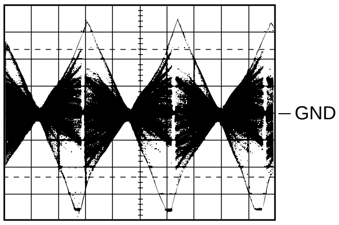
(85) CN902 pin 1 (V. DEF output)
V: 5V/div. H: 5msec/div.



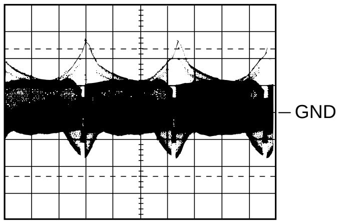
(86) CN902 pin 3 (RH input)
V: 5V/div. H: 5msec/div.



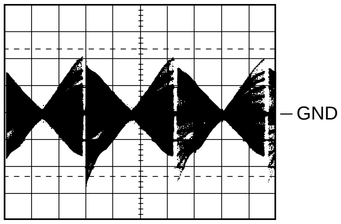
(87) CN902 pin 5 (RV output)
V: 5V/div. H: 5msec/div.



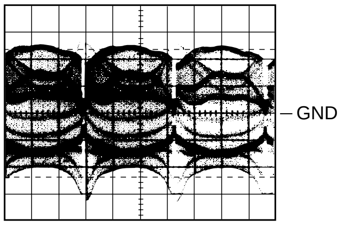
(88) CN901 pin 3 (GH output)
V: 5V/div. H: 5msec/div.



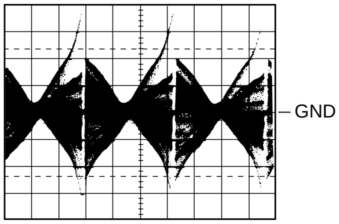
(89) CN901 pin 5 (GV output)
V: 5V/div. H: 5msec/div.



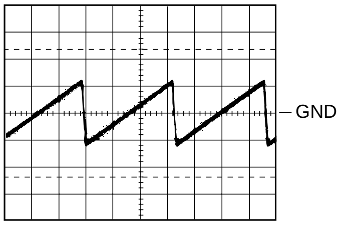
(90) CN903 pin 3 (BH output)
V: 5V/div. H: 5msec/div.



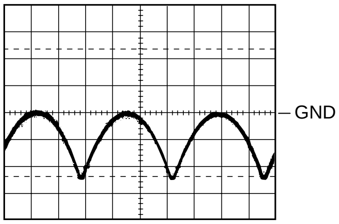
(91) CN903 pin 5 (BV output)
V: 5V/div. H: 5msec/div.



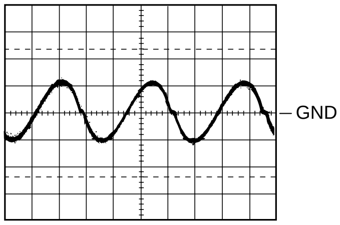
(92) IC1003 pin 4 (V1 output)
V: 1V/div. H: 5msec/div.



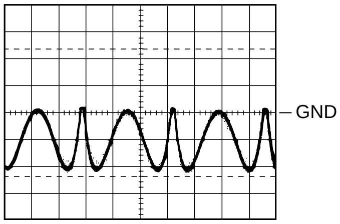
(93) IC1003 pin 5 (V2 output)
V: 1V/div. H: 5msec/div.



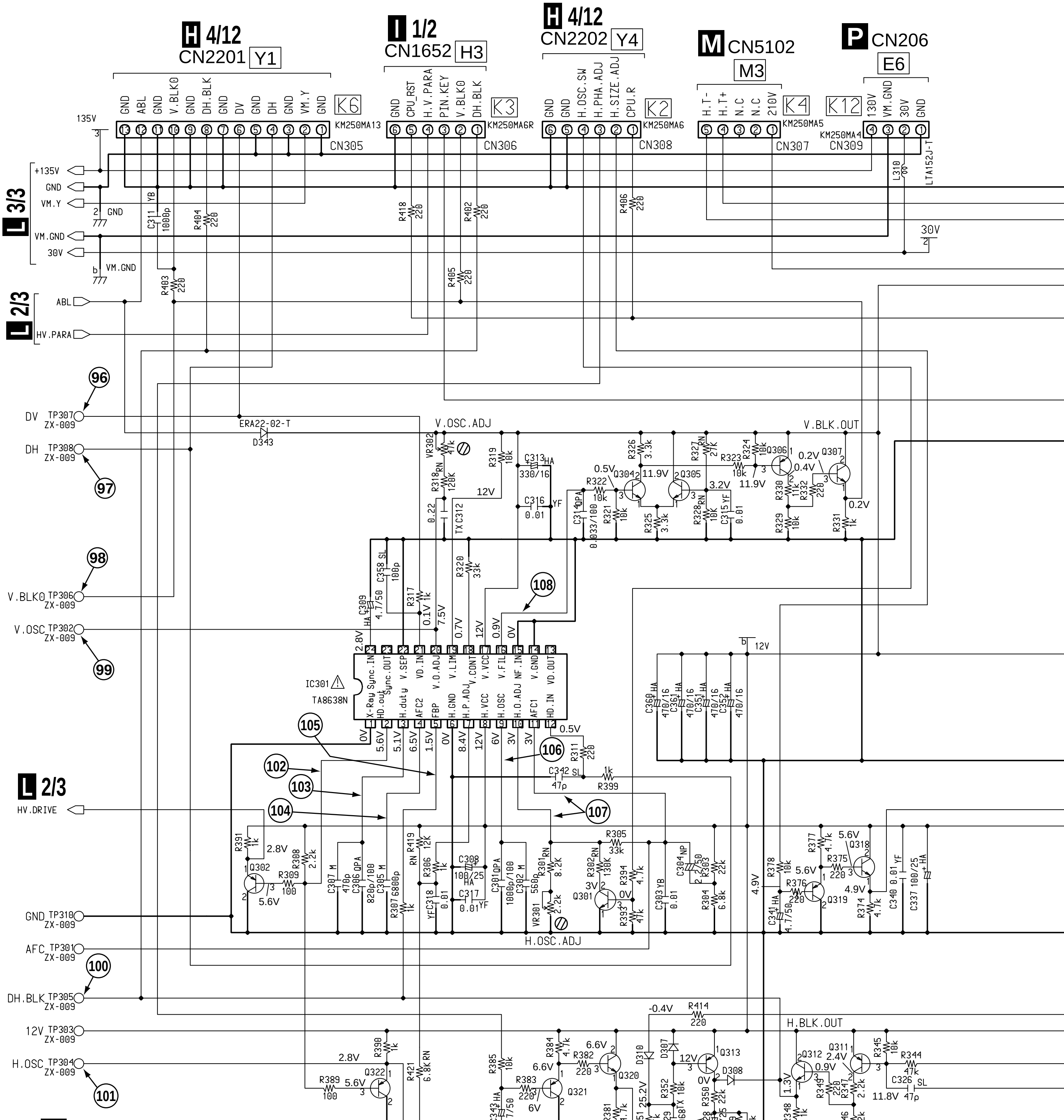
(94) IC1003 pin 6 (V3 output)
V: 1V/div. H: 5msec/div.



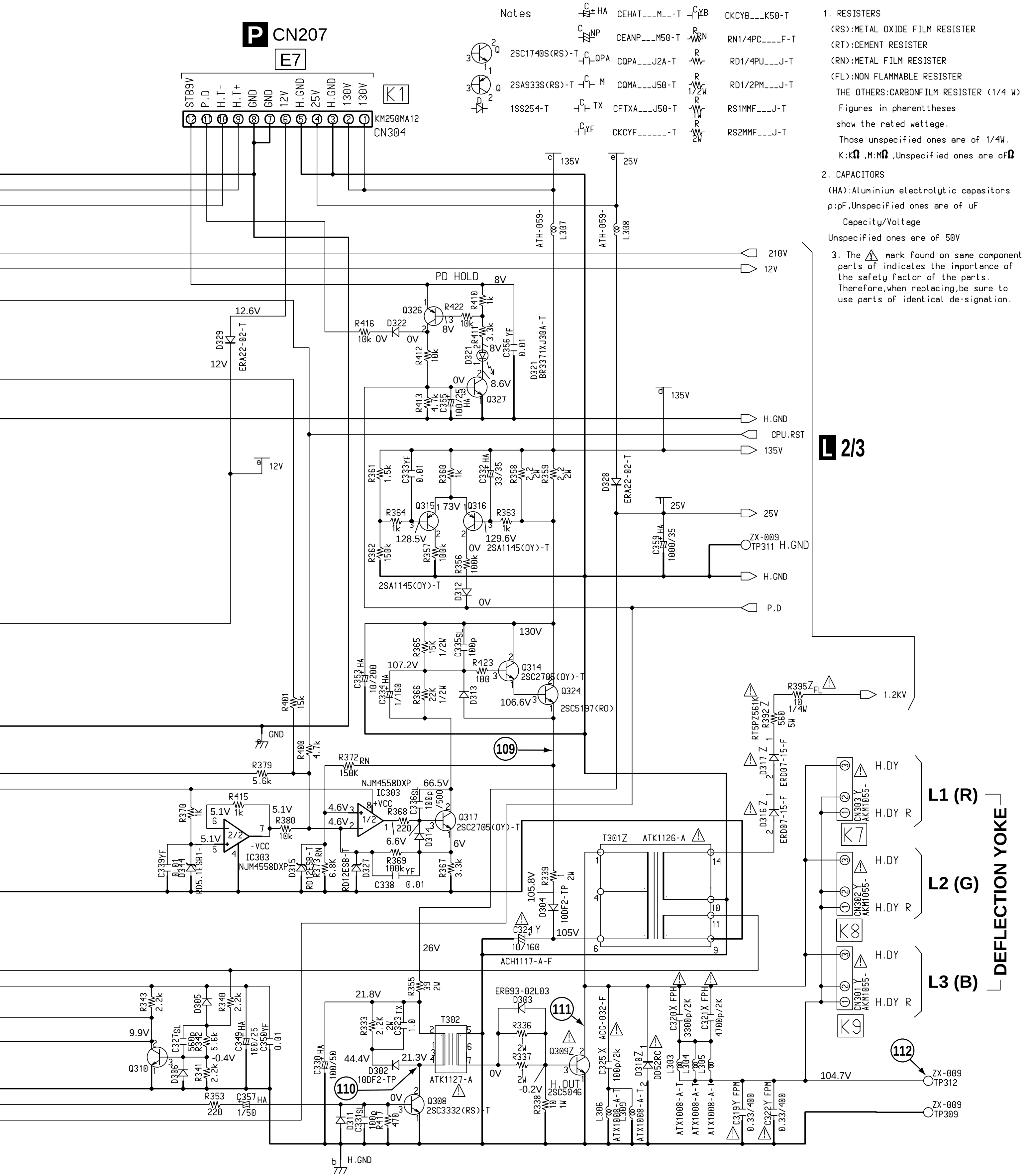
(95) IC1003 pin 7 (V4 output)
V: 1V/div. H: 5msec/div.



3.33 DEFLECTION SERVICE ASSY (1/3)


H 4/12
CN2201 Y1
I 1/2
CN1652 H3
H 4/12
CN2202 Y4
M CN5102
M3
P CN206
E6
GND ABL GND V.BLKO GND DH.BLK GND DV GND DH GND VM.Y GND
K6
KM250MA13
CN305
GND CPU_RST H.V.PARA PIN.KEY V.BLKO DH.BLK
K3
KM250MA6R
CN306
GND GND H.OSC.SW H.PHA.ADJ H.SIZE.ADJ CPU.R
K2
KM250MA6
CN308
H.T- H.T+ N.C N.C 210V
K4
KM250MA5
CN307
K12
130V VM.GND 30V GND
KM250MA4
CN309
L310
LTA152J-T
135V
+135V
GND
VM.Y
VM.GND
30V
L 3/3
L 2/3
ABL
HV.PARA
C311 YB 1000p
R404 220
R418 220
R402 220
R406 220
R403 220
R405 220
30V
96
DV TP307 ZX-009
97
DH TP308 ZX-009
98
V.BLKO TP306 ZX-009
V.OSC TP302 ZX-009
99
ERA22-02-T
D343
V.OSC.ADJ
VR302 47k
R318 RN 120k
C312 TX 0.22
R319 10k
C313 HA 330/16
C316 0.01 YF
12V
C314 QPA 0.033/100
R321 10k
R322 10k
Q304
0.5V
11.9V
Q305
R326 3.3k
R325 3.3k
R327 RN 27k
R328 RN 10k
C315 YF 0.01
3.2V
R323 10k
R324 10k
11.9V
Q306
0.2V
0.4V
Q307
R330 1k
R332 220
R329 10k
R331 1k
0.2V
V.BLK.OUT
C358 SL 100p
C309 HA 4.7/50
R317 1k
R320 33k
108
2.8V 0.1V 7.5V 0.7V 12V 0.9V 0V
IC301
TA8638N
X-Ray Sync.IN HD.out Sync.OUT H.duty V.SEP AFC2 VD.IN FBP V.O.ADJ H.GND V.LIM H.P.ADJ V.CONT H.VCC V.VCC H.OSC V.FIL H.O.ADJ NF.IN AFC1 V.GND HD.IN VD.OUT
0V 5.6V 5.1V 6.5V 1.5V 0V 8.4V 12V 6V 3V 3V 0.5V
12V
C360 HA 470/16
C361 HA 470/16
C351 HA 470/16
C352 HA 470/16
105
102
103
104
106
107
R311 220
C342 SL 47p
R399 1k
L 2/3
HV.DRIVE
R391 1k
2.8V
R308 2.2k
Q302
R309 100
5.6V
C307 M 470p
C306 QPA 820p/100
C305 M 6800p
R307 1k
R419 RN 12k
R306 1k
C318 YF 0.01
C308 HA 100/25
C317 0.01 YF
C301 QPA 1000p/100
C302 M 560p
R301 RN 8.2k
VR301 2.2k
H.OSC.ADJ
R302 RN 130k
Q301
3V
0V
R305 33k
R394 4.7k
R393 47k
C303 YB 0.01
C304 NP 2.2/50
R303 22k
R304 6.8k
4.9V
R378 10k
5.6V
R376 220
Q319
C341 HA 4.7/50
R377 4.7k
5.6V
Q318
R375 220
4.9V
R374 4.7k
C340 YF 0.01
C337 HA 100/25
GND TP310 ZX-009
AFC TP301 ZX-009
100
DH.BLK TP305 ZX-009
12V TP303 ZX-009
H.OSC TP304 ZX-009
101
2.8V
R390 1k
R389 100
5.6V
Q322
R421 RN 6.8k
R385 10k
C343 HA 4.7/50
R384 4.7k
6.6V
R382 220
6.6V
Q320
R383 220
6V
Q321
R381 4.7k
-0.4V
R414 220
D310
D307
25.2V
R351 47k
C329 TX 0.068
R352 10k
12V
Q313
0V
D308
R350 22k
C328 HA 220/25
R409 33k
H.BLK.OUT
1.3V
Q312
2.4V
0.9V
Q311
R345 10k
R344 47k
C326 SL 47p
11.8V
R348 1k
R349 220
R347 2.2k
R346 2.2k
0V
D309

L 1/3 DEFLECTION SERVICE ASSY
(AWV1809)
- H. DEF BLOCK

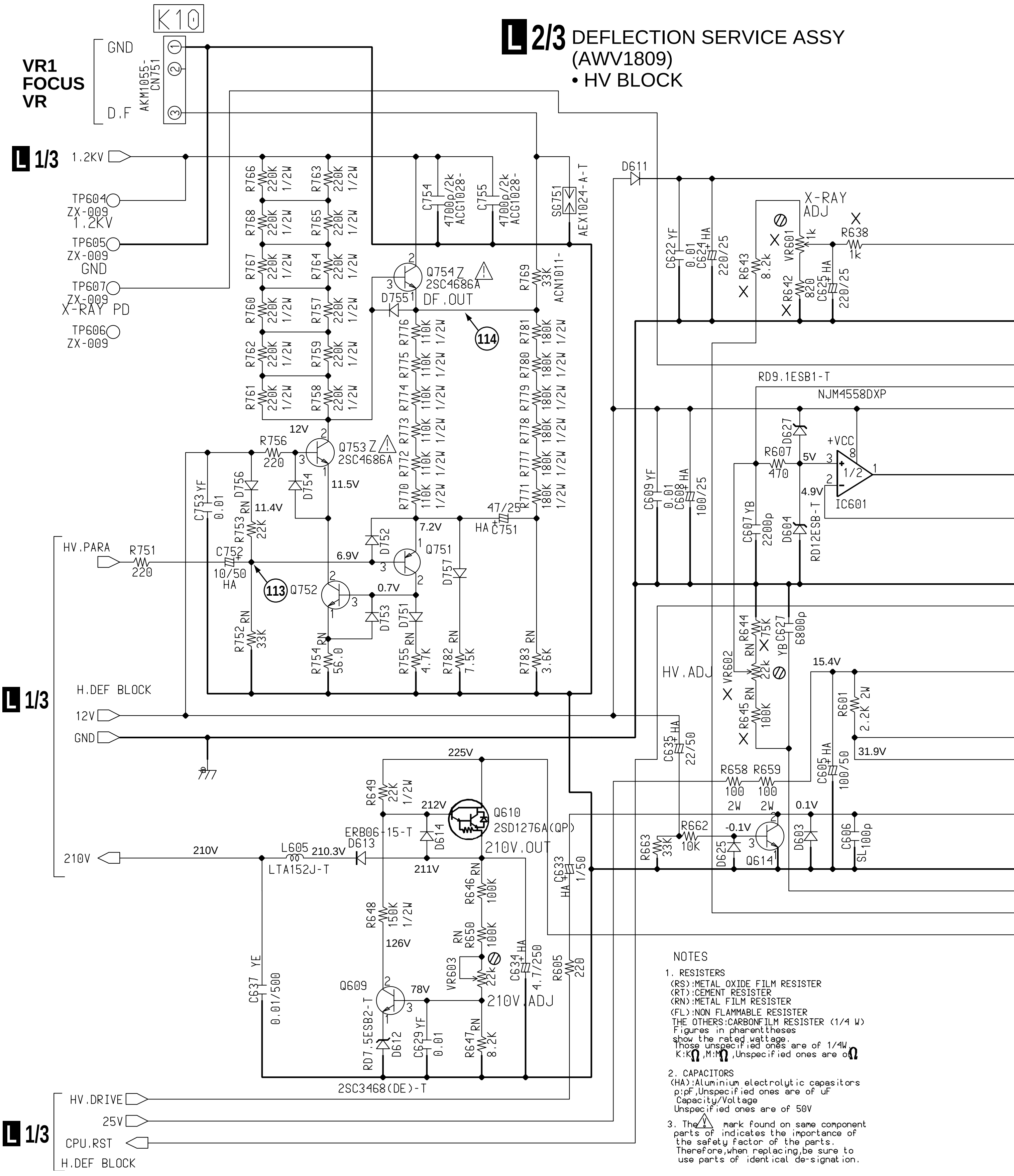

P CN207
E7
K1
STB9V
P.D
H.T-
H.T+
GND
GND
12V
H.GND
25V
H.GND
130V
130V
KM250MA12
CN304
135V
25V
ATH-059- L307
ATH-059- L308
210V
12V
PD HOLD
8V
12.6V
D329
ERA22-02-T
12V
R416 10k 0V
D322
0V
Q326
R422 10k
R410 1k
R411 3.3k
8V
D321 BR3371XJ30A-T
C356 YF 0.01
R412 10k
0V
8.6V
Q327
R413 4.7k
C355 100/25 HA
135V
H.GND
CPU.RST
135V
L 2/3
12V
R361 1.5k
C333 YF 0.01
R360 1k
C332 HA 33/35
R358 2W
R359 2W
D328
ERA22-02-T
R364 1k
Q315 73V Q316
R363 1k
25V
25V
128.5V
129.6V
0V
2SA1145(OY)-T
C359 HA 1000/35
ZX-009 TP311 H.GND
R362 150k
R357 100k
R356 100k
H.GND
2SA1145(OY)-T
D312
0V
P.D
130V
R365 15K 1/2W
C335 SL 100p
107.2V
R423 100
Q314 2SC2705(OY)-T
C353 HA 10/200
C334 HA 1/160
R366 22K 1/2W
D313
Q324
106.6V
2SC5187(RO)
R395 Z FL 10 1/4W
1.2KV
RT5PZ561K
R392 Z 560 5W
R401 15k
GND
R400 4.7k
109
R379 5.6k
R372 RN 150K
NJM4558DXP IC303
66.5V
C336 SL 100p /500
D317 Z ERD07-15-F
H.DY
L1 (R)
H.DY R
CN303 Y AKM1055-
K7
R415 1k
R370 1k
5.1V
5.1V
4.6V
4.6V
+VCC
1/2
R368 220
Q317 2SC2705(OY)-T
D316 Z ERD07-15-F
R380 10k
5.1V
2/2
D314
6V
6.6V
T301 Z ATK1126-A
-VCC IC303 NJM4558DXP
C339 YF 0.01
D344 RD5.1ESB1-T
D315
R373 RN 6.8K
RD12ESB-T
D327 RD12ESB-T
R369 100k
C338 YF 0.01
R367 3.3k
105.8V
R339 2W
D304 10DF2-TP
C324 Y 10/160
105V
ACH1117-A-F
26V
H.DY
L2 (G)
H.DY R
CN302 Y AKM1055-
K8
DEFLECTION YOKE
H.DY
L3 (B)
H.DY R
CN301 Y AKM1055-
K9
R343 2.2k
D305
R340 2.2k
9.9V
C327 SL 560p
R342 5.6k
C349 HA 100/25
C350 YF 0.01
-0.4V
Q310
D306
R341 2.2k
R353 220
C357 HA 1/50
21.8V
R355 39 2W
R333 2.2K 2W
C323 TX 1.0
T302
44.4V
21.3V
D302 10DF2-TP
110
ATK1127-A
0V
Q308 2SC3332(RS)-T
D311
C331 SL 1000p
R417 470
ERB93-02L03 D303
111
R336 2W
R337 2W
0V
-0.2V
R338 10 1W
Q309 Z
H.OUT 2SC5046
C325 X 100p/2k
ACC-032-F
D318 Z DD52RC
C320 X FPM 3300p/2K
C321 X FPM 4700p/2K
L303 L304 L305
L306 L309 ATX1008-A-T
ATX1008-A-T
C319 Y FPM 0.33/400
C322 Y FPM 0.33/400
104.7V
112
ZX-009 TP312
ZX-009 TP309
b H.GND

Notes

		C HA	CEHAT___M__-T	C YB	CKCYB___K50-T
		C NP	CEANP___M50-T	R RN	RN1/4PC____F-T
Q	2SC1740S(RS)-T	C QPA	CQPA___J2A-T	R	RD1/4PU___J-T
Q	2SA933S(RS)-T	C M	CQMA___J50-T	R 1/2W	RD1/2PM___J-T
D	1SS254-T	C TX	CFTXA___J50-T	R 1W	RS1MMF___J-T
		C YF	CKCYF______-T	R 2W	RS2MMF___J-T

1. RESISTERS
   (RS):METAL OXIDE FILM RESISTER
   (RT):CEMENT RESISTER
   (RN):METAL FILM RESISTER
   (FL):NON FLAMMABLE RESISTER
   THE OTHERS:CARBONFILM RESISTER (1/4 W)
   Figures in pharenttheses show the rated wattage.
   Those unspecified ones are of 1/4W.
   K:KΩ ,M:MΩ ,Unspecified ones are ofΩ
2. CAPACITORS
   (HA):Aluminium electrolytic capasitors
   p:pF,Unspecified ones are of uF
   Capacity/Voltage
   Unspecified ones are of 50V
3. The ⚠ mark found on same component parts of indicates the importance of the safety factor of the parts. Therefore,when replacing,be sure to use parts of identical de-signation.

3.34 DEFLECTION SERVICE ASSY (2/3)

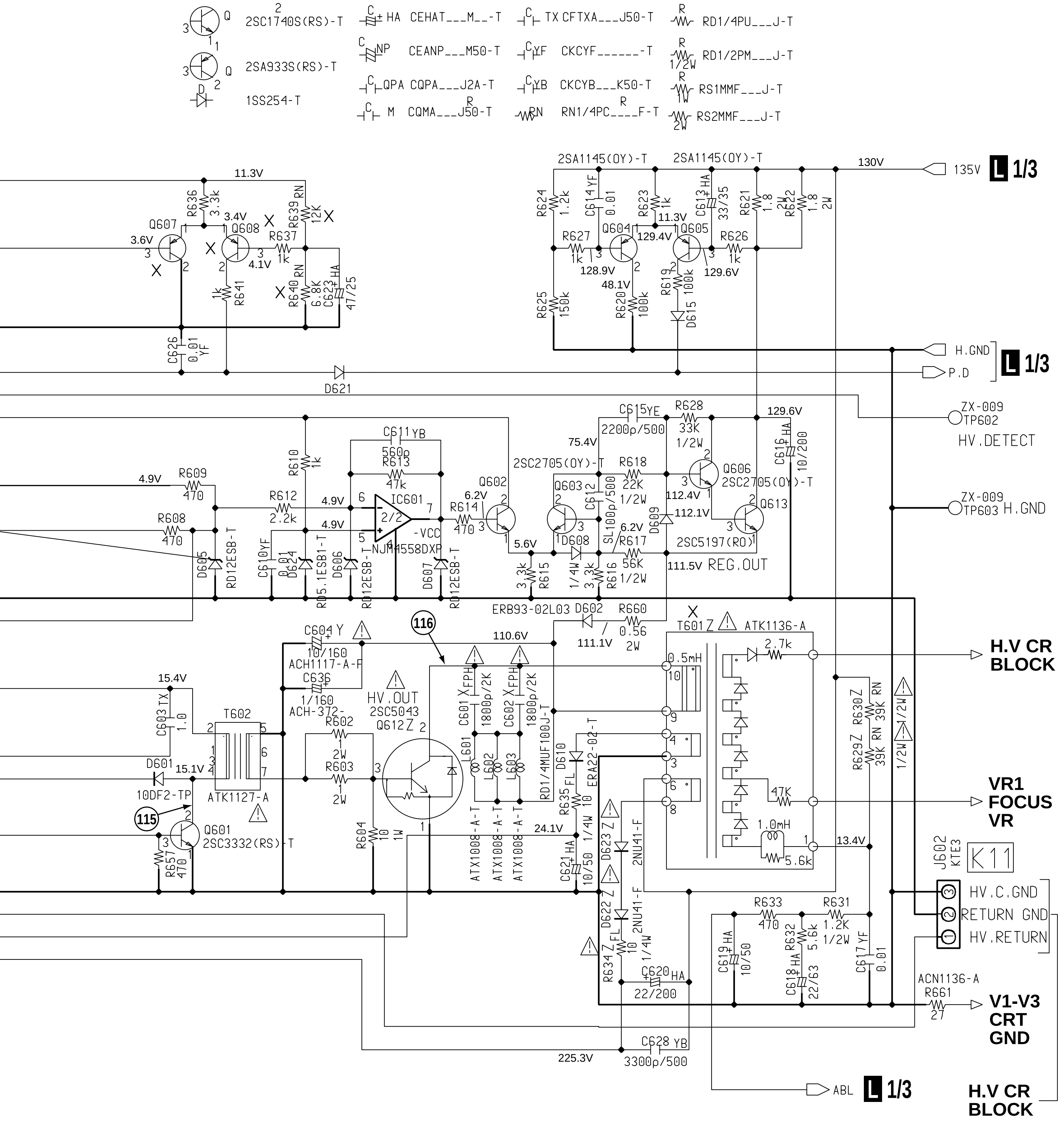

K10
VR1
FOCUS
VR
GND
D.F
AKM1055-
CN751
L 2/3 DEFLECTION SERVICE ASSY
(AWV1809)
• HV BLOCK
L 1/3
1.2KV
TP604
ZX-009
1.2KV
TP605
ZX-009
GND
TP607
ZX-009
X-RAY PD
TP606
ZX-009
R766 220K 1/2W
R763 220K 1/2W
R768 220K 1/2W
R765 220K 1/2W
R767 220K 1/2W
R764 220K 1/2W
R760 220K 1/2W
R757 220K 1/2W
R762 220K 1/2W
R759 220K 1/2W
R761 220K 1/2W
R758 220K 1/2W
C754 4700p/2k ACG1028-
C755 4700p/2k ACG1028-
SG751 AEX1024-A-T
Q754 2SC4686A
D7551
DF.OUT
114
R769 33K ACN1011-
R776 110K 1/2W
R775 110K 1/2W
R774 110K 1/2W
R773 110K 1/2W
R772 110K 1/2W
R770 110K 1/2W
R781 180K 1/2W
R780 180K 1/2W
R779 180K 1/2W
R778 180K 1/2W
R777 180K 1/2W
R771 180K 1/2W
12V
R756 220
Q753 2SC4686A
D756
D754
11.4V
11.5V
C753 YF 0.01
R753 RN 22K
47/25
HA C751
7.2V
D752
Q751
HV.PARA
R751 220
C752 10/50 HA
6.9V
113
Q752
0.7V
D757
D753
D751
R752 RN 33K
R754 RN 56.0
R755 RN 4.7K
R782 RN 7.5K
R783 RN 3.6K
H.DEF BLOCK
12V
GND
225V
R649 22K 1/2W
212V
Q610 2SD1276A(QP)
ERB06-15-T
D613
D614
210V.OUT
210V
210V
L605 LTA152J-T
210.3V
211V
R646 RN 100K
R648 150K 1/2W
126V
R650 RN 100K
VR603 22k
C634 HA 4.7/250
R605 220
C633 HA 1/50
C637 YE 0.01/500
Q609
78V
210V.ADJ
RD7.5ESB2-T
D612
C629 YF 0.01
R647 RN 8.2K
2SC3468(DE)-T
HV.DRIVE
25V
CPU.RST
H.DEF BLOCK
D611
X-RAY ADJ
C622 YF 0.01
C624 HA 220/25
R643 8.2k
VR601 1k
R638 1k
R642 820
C625 HA 220/25
RD9.1ESB1-T
NJM4558DXP
D627
+VCC
R607 470
5V
4.9V
1/2
IC601
C609 YF 0.01
C608 HA 100/25
C607 YB 2200p
D604
RD12ESB-T
HV.ADJ
VR602 22k
R644 RN 75K
C627 YB 6800p
R645 RN 100K
15.4V
R601 2.2K 2W
31.9V
C635 HA 22/50
R658 100 2W
R659 100 2W
C605 HA 100/50
0.1V
R663 33K
R662 10K
-0.1V
D625
Q614
D603
C606 SL 100p

NOTES

1. RESISTERS
(RS):METAL OXIDE FILM RESISTER
(RT):CEMENT RESISTER
(RN):METAL FILM RESISTER
(FL):NON FLAMMABLE RESISTER
THE OTHERS:CARBONFILM RESISTER (1/4 W)
Figures in pharenttheses
show the rated wattage.
Those unspecified ones are of 1/4W.
K:KΩ,M:MΩ,Unspecified ones are of Ω

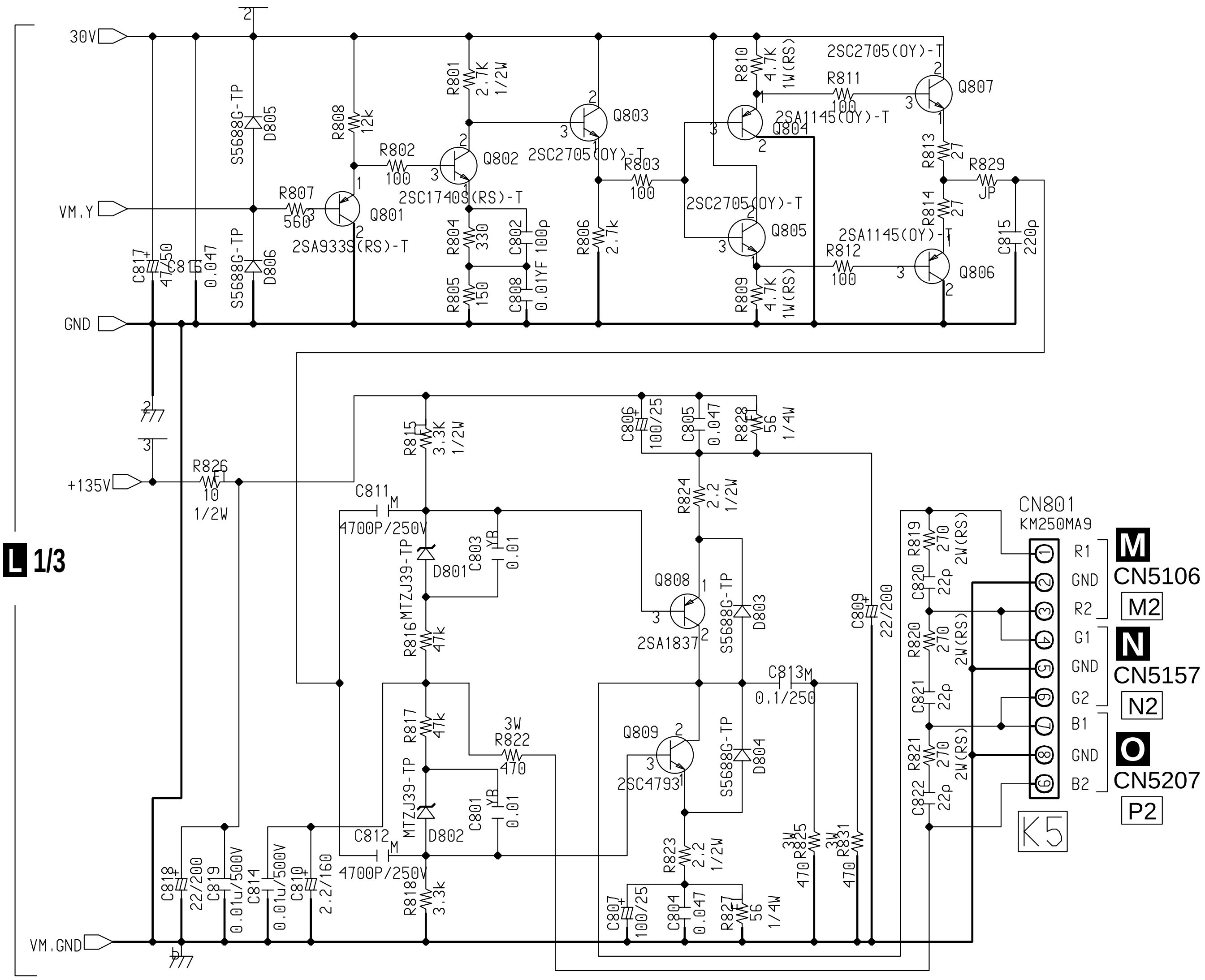
2. CAPACITORS
(HA):Aluminium electrolytic capasitors
p:pF,Unspecified ones are of uF
Capacity/Voltage
Unspecified ones are of 50V

3. The ⚠ mark found on same component
parts of indicates the importance of
the safety factor of the parts.
Therefore,when replacing,be sure to
use parts of identical de-signation.


Q 2SC1740S(RS)-T
Q 2SA933S(RS)-T
D 1SS254-T
C HA CEHAT___M__-T
C NP CEANP___M50-T
C QPA CQPA___J2A-T
C M CQMA___J50-T
C TX CFTXA___J50-T
C YF CKCYF______-T
C YB CKCYB___K50-T
R RN RN1/4PC____F-T
R RD1/4PU___J-T
R 1/2W RD1/2PM___J-T
R 1W RS1MMF___J-T
R 2W RS2MMF___J-T
11.3V
R636 3.3k
R639 RN 12K
Q607 3.6V
Q608 3.4V
R637 1k
4.1V
R641 1k
R640 RN 6.8K
C623 HA 47/25
C626 0.01 YF
D621
2SA1145(OY)-T
2SA1145(OY)-T
130V
135V
1/3
R624 1.2k
C614 YF 0.01
R623 1k
C613 HA 33/35
R621 1.8 2W
R622 1.8 2W
R627 1k
Q604 129.4V
Q605 11.3V
R626 1k
128.9V
48.1V
129.6V
R619 100k
R625 150k
R620 100k
D615
H.GND
P.D
1/3
C615 YE 2200p/500
R628 33K 1/2W
129.6V
ZX-009 TP602
HV.DETECT
75.4V
C616 HA 10/200
C611 YB 560p
R613 47k
R610 1k
4.9V
R609 470
R612 2.2k
4.9V
4.9V
IC601 2/2 NJM4558DXP
-VCC
R608 470
Q602 6.2V
R614 470
2SC2705(OY)-T
Q603
C612 SL100p/500
R618 22K 1/2W
Q606 2SC2705(OY)-T
112.4V
112.1V
Q613 2SC5197(RO)
ZX-009 TP603 H.GND
D605 RD12ESB-T
C610 YF 0.01
D624 RD5.1ESB1-T
D606 RD12ESB-T
D607 RD12ESB-T
5.6V
R615 3.3k
D608 1/4W
R616 3.3k
6.2V
R617 56K 1/2W
D609
111.5V REG.OUT
ERB93-02L03 D602
R660 0.56 2W
111.1V
T601 Z ATK1136-A
2.7k
0.5mH
H.V CR BLOCK
C604 Y 10/160 ACH1117-A-F
116
110.6V
C636 1/160 ACH-372-
HV.OUT 2SC5043 Q612 Z
C601 FPH 1800p/2K
C602 FPH 1800p/2K
RD1/4MUF100J-T
15.4V
C603 TX 1.0
T602 ATK1127-A
R602 2W 1
R603 1 2W
L601 L602 L603 ATX1008-A-T
D610 ERA22-02-T
R635 FL 10 1/4W
R630 Z RN 39K
R629 Z RN 39K
1/2W 1/2W
47K
VR1 FOCUS VR
D601 15.1V 10DF2-TP
115
Q601 2SC3332(RS)-T
R657 470
R604 10 1W
24.1V
C621 HA 10/50
D623 Z 2NU41-F
1.0mH
5.6k
13.4V
J602 KTE3
K11
HV.C.GND
RETURN GND
HV.RETURN
D622 Z 2NU41-F
R634 Z FL 10 1/4W
R633 470
R631 1.2K 1/2W
C619 HA 10/50
R632 5.6k
C618 HA 22/63
C617 YF 0.01
C620 HA 22/200
ACN1136-A
R661 27
V1-V3 CRT GND
C628 YB 3300p/500
225.3V
ABL 1/3
H.V CR BLOCK
A B C D

3.35 DEFLECTION SERVICE ASSY (3/3)

L 3/3 DEFLECTION SERVICE ASSY (AWV1809)
• VM BLOCK


30V
VM.Y
GND
+135V
VM.GND
L 1/3
D805 S5688G-TP
D806 S5688G-TP
R808 12k
R807 560
Q801 2SA933S(RS)-T
R802 100
Q802 2SC1740S(RS)-T
R801 2.7K 1/2W
Q803 2SC2705(OY)-T
R804 330
C802 100p
R805 150
C808 0.01YF
R806 2.7k
R803 100
R810 4.7K 1W(RS)
Q804 2SA1145(OY)-T
Q805 2SC2705(OY)-T
R809 4.7K 1W(RS)
R811 100
R812 100
Q807 2SC2705(OY)-T
Q806 2SA1145(OY)-T
R813 27
R814 27
R829 JP
C815 220p
C817 47/50
C816 0.047
R826 10 1/2W
C811 M 4700P/250V
R815 3.3K 1/2W
D801 MTZJ39-TP
C803 YB 0.01
R816 47k
R817 47k
R822 3W 470
D802 MTZJ39-TP
C801 YB 0.01
C812 M 4700P/250V
R818 3.3k
C818 22/200
C819 0.01u/500V
C814 0.01u/500V
C810 2.2/160
C806 100/25
C805 0.047
R828 56 1/4W
R824 2.2 1/2W
Q808 2SA1837
D803 S5688G-TP
C813 M 0.1/250
Q809 2SC4793
D804 S5688G-TP
R823 2.2 1/2W
C807 100/25
C804 0.047
R827 56 1/4W
R825 3W 470
R831 3W 470
C809 22/200
R819 270 2W(RS)
C820 22p
R820 270 2W(RS)
C821 22p
R821 270 2W(RS)
C822 22p
CN801 KM250MA9
R1 GND R2 G1 GND G2 B1 GND B2
M CN5106 M2
N CN5157 N2
O CN5207 P2
K5

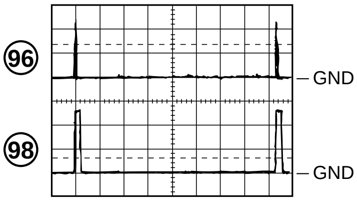
L

DEFLECTION SERVICE ASSY

Input signal
Video signal : EIA full color-bar
Picture quality : Standard
Range :DC range (Unless otherwise noted)

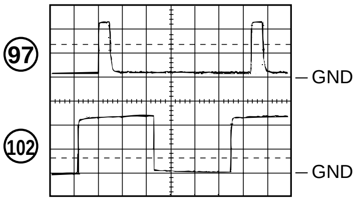
(96) **TP307 (DV)**
V: 2V/div. H: 2msec/div.

(98) **TP306 (V. BLK)**
V: 2V/div. H: 2msec/div.

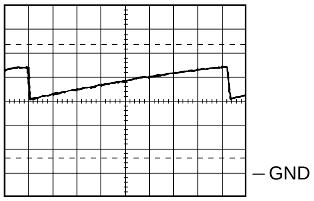


(97) **TP308 (DH)**
V: 2V/div. H: 5µsec/div.

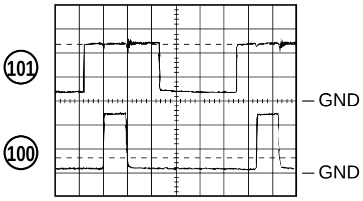
(102) **IC301 pin 2**
V: 5V/div. H: 5µsec/div.



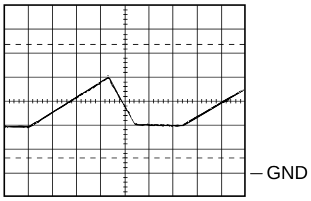
(99) **IC301 pin 20**
V: 2V/div. H: 2msec/div.



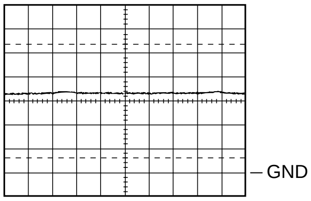
(100) **TP305 (DH. BLK)**
V: 2V/div. H: 5µsec/div.
(101) **TP304 (H. OSC)**
V: 2V/div. H: 5µsec/div.



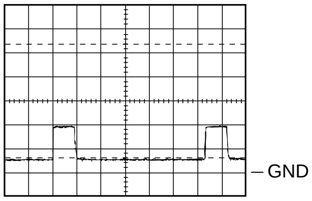
(103) **IC301 pin 3**
V: 2V/div. H: 5µsec/div.



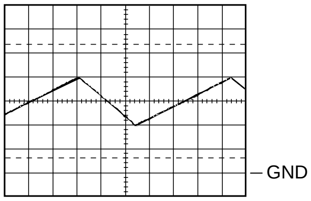
(104) **IC301 pin 4**
V: 2V/div. H: 5µsec/div.



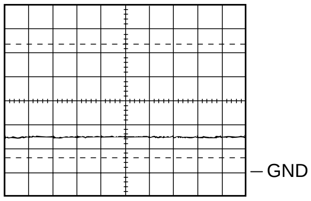
(105) **IC301 pin 5**
V: 2V/div. H: 5µsec/div.



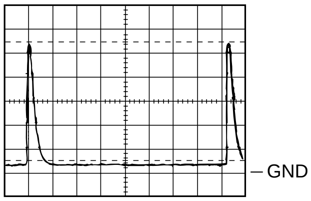
(106) **IC301 pin 9**
V: 2V/div. H: 5µsec/div.



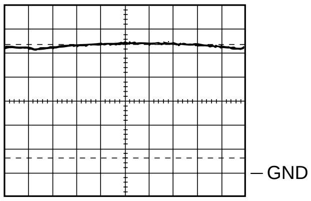
(107) **IC301 pin 10, 11**
V: 2V/div. H: 5µsec/div.



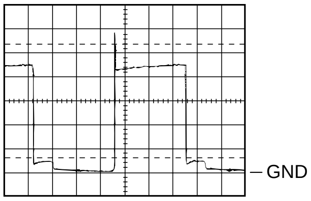
(108) **IC301 pin 16**
V: 2V/div. H: 2msec/div.



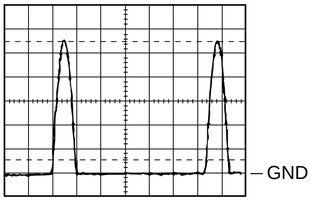
(109) **Q324 Emitter**
V: 20V/div. H: 2msec/div.



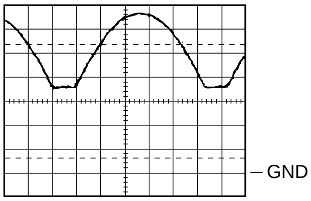
(110) **Q308 Collector**
V: 10V/div. H: 5µsec/div.



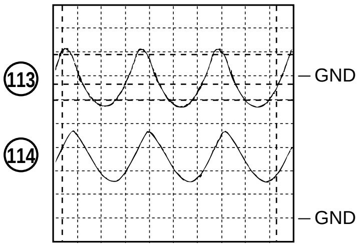
(111) **Q309 Collector**
V: 200V/div. H: 5µsec/div.



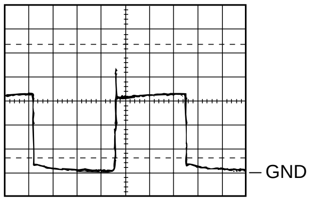
(112) **TP312**
V: 20V/div. H: 5µsec/div.



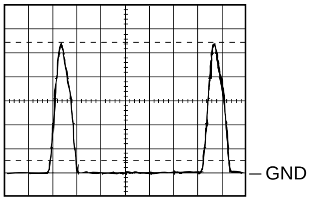
(113) **Q751 Base**
V: 2V/div. H: 10µsec/div.
(114) **Q754 Emitter**
V: 200V/div. H: 10µsec/div.



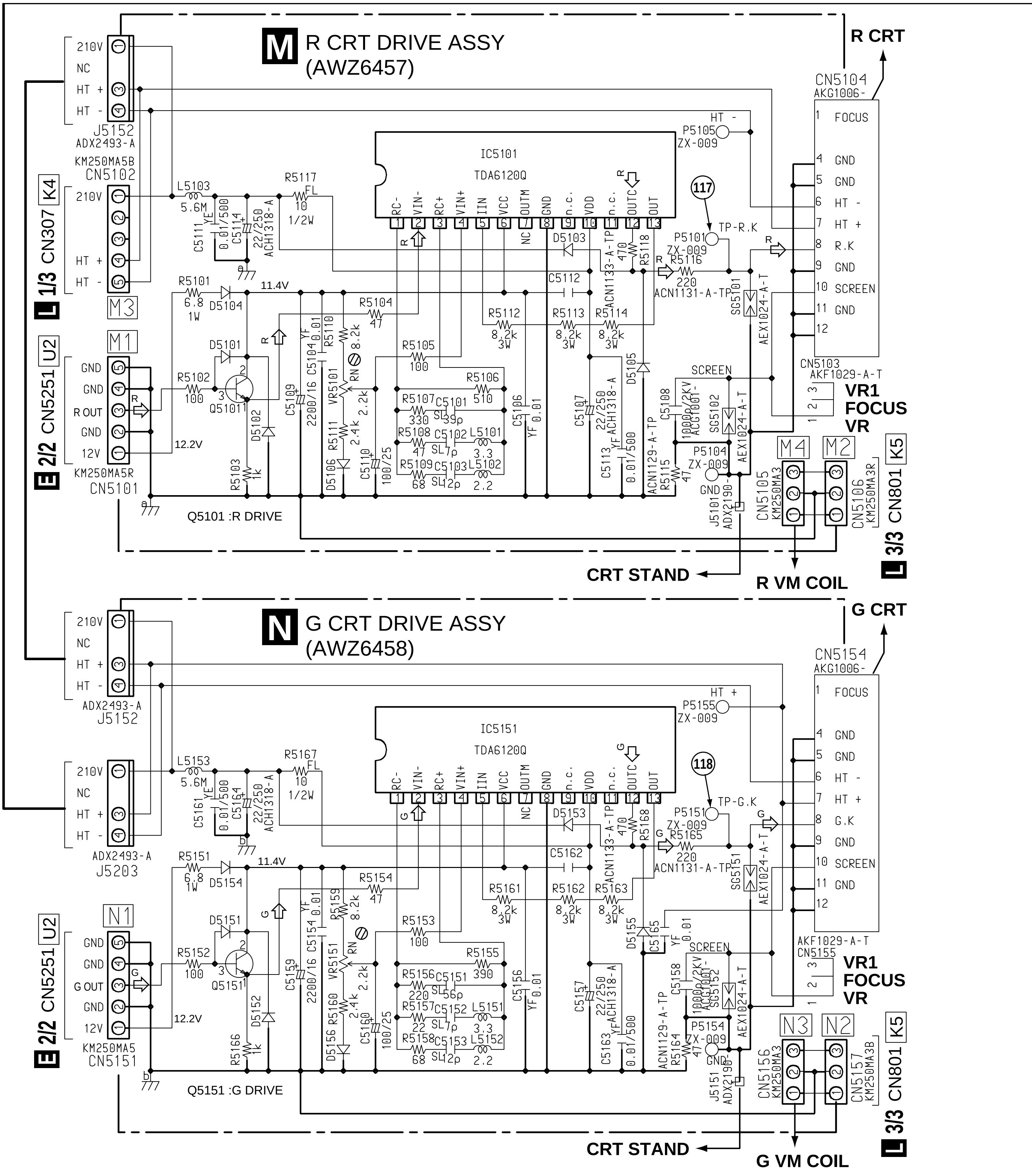
(115) **Q601 Collector**
V: 10V/div. H: 5µsec/div.



(116) **Q612 Collector**
V: 200V/div. H: 5µsec/div.



3.36 R, G and B CRT DRIVE ASSYS


M R CRT DRIVE ASSY
(AWZ6457)
R CRT
CN5104
AKG1006-
1 FOCUS
4 GND
5 GND
6 HT -
7 HT +
8 R.K
9 GND
10 SCREEN
11 GND
12
J5152
ADX2493-A
210V
NC
HT +
HT -
KM250MA5B
CN5102
K4
L 1/3 CN307
M3
M1
U2
E 2/2 CN5251
GND
GND
R OUT
GND
12V
KM250MA5R
CN5101
IC5101
TDA6120Q
RC-
VIN-
RC+
VIN+
IIN
VCC
OUTM
GND
n.c.
VDD
n.c.
OUTC
OUT
L5103
5.6M
C5111
C5114
22/250
ACH1318-A
0.01/500
R5117
FL
10
1/2W
R5101
6.8
1W
D5104
11.4V
D5101
R5102
100
Q5101
D5102
R5103
1k
12.2V
C5109
2200/16
C5104
0.01
R5110
8.2k
VR5101
R5111
2.4k
2.2k
D5106
C5110
100/25
R5104
47
R5105
100
R5106
510
R5107
330
C5101
39p
R5108
47
C5102
7p
L5101
3.3
R5109
68
C5103
12p
L5102
2.2
R5112
8.2k
3W
R5113
8.2k
3W
R5114
8.2k
3W
C5106
0.01
C5112
D5103
ACN1133-A-TP
470
R5118
C5107
22/250
ACH1318-A
C5113
0.01/500
D5105
P5101
ZX-009
TP-R.K
117
R5116
220
ACN1131-A-TP
SG5101
AEX1024-A-T
HT -
P5105
ZX-009
SCREEN
C5108
1000p/2KV
ACG1001-
SG5102
AEX1024-A-T
ACN1129-A-TP
R5115
47
P5104
ZX-009
GND
J5101
ADX2190-
CN5103
AKF1029-A-T
VR1
FOCUS
VR
M4
M2
K5
CN5105
KM250MA3
CN5106
KM250MA3R
CN801
L 3/3
Q5101 :R DRIVE
CRT STAND
R VM COIL
N G CRT DRIVE ASSY
(AWZ6458)
G CRT
CN5154
AKG1006-
1 FOCUS
4 GND
5 GND
6 HT -
7 HT +
8 G.K
9 GND
10 SCREEN
11 GND
12
J5152
ADX2493-A
J5203
ADX2493-A
210V
NC
HT +
HT -
N1
U2
E 2/2 CN5251
GND
GND
G OUT
GND
12V
KM250MA5
CN5151
IC5151
TDA6120Q
L5153
5.6M
C5161
C5164
22/250
ACH1318-A
0.01/500
R5167
FL
10
1/2W
R5151
6.8
1W
D5154
11.4V
D5151
R5152
100
Q5151
D5152
R5166
1k
12.2V
C5159
2200/16
C5154
0.01
R5159
8.2k
VR5151
R5160
2.4k
2.2k
D5156
C5160
100/25
R5154
47
R5153
100
R5155
390
R5156
220
C5151
56p
R5157
22
C5152
7p
L5151
3.3
R5158
68
C5153
12p
L5152
2.2
R5161
8.2k
3W
R5162
8.2k
3W
R5163
8.2k
3W
C5156
0.01
C5162
D5153
ACN1133-A-TP
470
R5168
C5157
22/250
ACH1318-A
C5163
0.01/500
D5155
C5165
0.01
P5151
ZX-009
TP-G.K
118
R5165
220
ACN1131-A-TP
SG5151
AEX1024-A-T
HT +
P5155
ZX-009
SCREEN
C5158
1000p/2KV
ACG1001-
SG5152
AEX1024-A-T
ACN1129-A-TP
R5164
47
P5154
ZX-009
GND
J5151
ADX2190-
AKF1029-A-T
CN5155
VR1
FOCUS
VR
N3
N2
K5
CN5156
KM250MA3
CN5157
KM250MA3B
CN801
L 3/3
Q5151 :G DRIVE
CRT STAND
G VM COIL

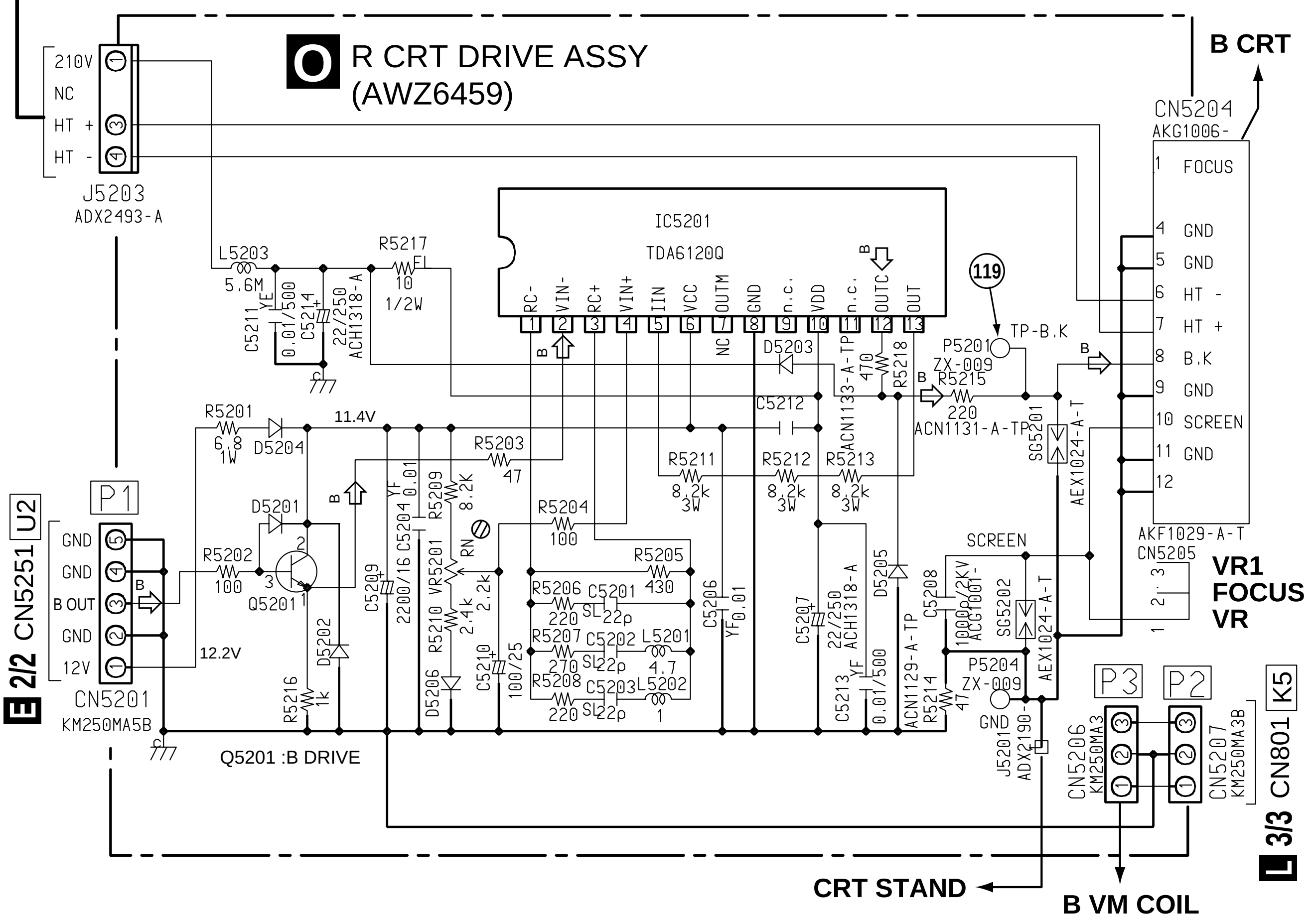
* Resistor indicated in ohm,1/4W+5% tolerance
unless otherwise noted.k:k ohm,M:M ohm

* Capacitor indicated in Capacity(uF)/Voltage(V)
unless otherwise noted.p:pF
indication without voltage is 50V
except Electrolytic capacitor.

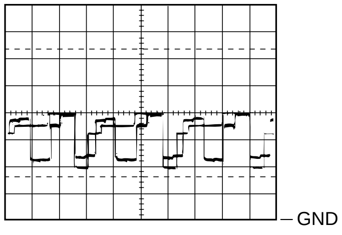
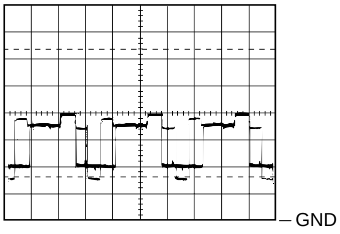
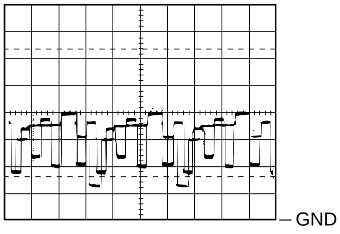
* Diode
S5688G-TP

* Transister
2SC1740S(RS)-T

R, G or B ⇨ : R, G or B SIGNAL ROUTE

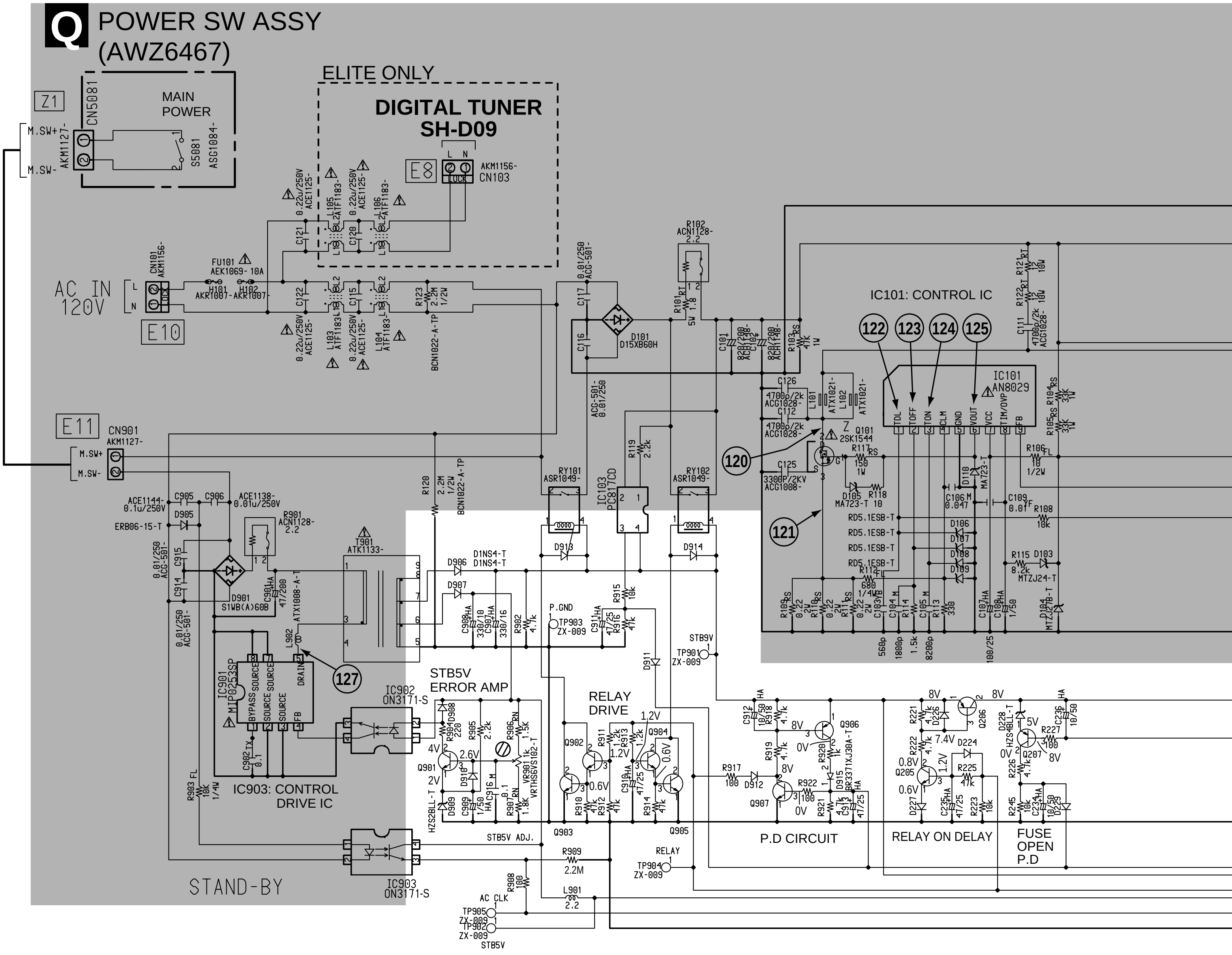

O
R CRT DRIVE ASSY
(AWZ6459)
B CRT
CN5204
AKG1006-
1 FOCUS
4 GND
5 GND
6 HT -
7 HT +
8 B.K
9 GND
10 SCREEN
11 GND
12
AKF1029-A-T
CN5205
VR1
FOCUS
VR
210V
NC
HT +
HT -
J5203
ADX2493-A
IC5201
TDA6120Q
RC-
VIN-
RC+
VIN+
IIN
VCC
OUTM
GND
n.c.
VDD
n.c.
OUTC
OUT
NC
L5203
5.6M
C5211
0.01/500
YE
C5214
22/250
ACH1318-A
R5217
10
1/2W
FI
119
TP-B.K
P5201
ZX-009
D5203
ACN1133-A-TP
470
R5218
R5215
220
ACN1131-A-TP
SG5201
AEX1024-A-T
C5212
R5201
6.8
1W
D5204
11.4V
R5203
47
R5211
8.2k
3W
R5212
8.2k
3W
R5213
8.2k
3W
P1
GND
GND
B OUT
GND
12V
CN5201
KM250MA5B
E 2/2 CN5251 U2
D5201
R5202
100
Q5201
12.2V
C5209
2200/16
C5204
0.01
YF
R5209
8.2k
VR5201
RN
2.2k
R5210
2.4k
R5204
100
R5205
430
R5206
220
C5201
22p
SL
R5207
270
C5202
22p
L5201
4.7
R5208
220
C5203
22p
L5202
1
C5206
0.01
YF
C5207
22/250
ACH1318-A
C5213
0.01/500
YF
D5205
ACN1129-A-TP
R5214
47
C5208
1000p/2KV
ACG1001-
SCREEN
SG5202
AEX1024-A-T
P5204
ZX-009
GND
J5201
ADX2190-
D5202
D5206
C5210
100/25
R5216
1k
Q5201 :B DRIVE
P3
P2
CN5206
KM250MA3
CN5207
KM250MA3B
K5 CN801 3/3 L
CRT STAND
B VM COIL

INPUT Signal
Video signal: EIA full color-bar
Picture quality: Standard
Range: DC range

⑰ **TP-R.K** V: 50V/div. H: 10µsec/div. 	⑱ **TP-G.K** V: 50V/div. H: 10µsec/div. 	⑲ **TP-B.K** V: 50V/div. H: 10µsec/div. 

3.37 POWER SUPPLY ASSY

P POWER SUPPLY ASSY
(AWV1795 : ELITE)
(AWV1808 : REGULAR)


Q POWER SW ASSY
(AWZ6467)
ELITE ONLY
DIGITAL TUNER
SH-D09
Z1
CN5081
AKM1127-
M.SW+
M.SW-
MAIN POWER
S5081
ASG1084-
E8
AKM1156-
CN103
L N
AC IN 120V
E10
CN101
AKM1156-
FU101
AEK1069-10A
H101 H102
AKR1007- AKR1007-
C121 C120 C122 C115
0.22u/250V
ACE1125-
L105 L106 L103 L104
ATF1183-
R123
2.2M
1/2W
BCN1022-A-TP
C117
0.01/250
ACG-501-
C116
D101
D15XB60H
R102
ACN1128-
2.2
R101
5W 1.8
C101 C102
820/200
ACH1148-
R103
47k
1W
IC101: CONTROL IC
IC101
AN8029
122
123
124
125
TDL TOFF TON CLM GND VOUT VCC TIM/OVP FB
R121 R122
RT
10W
C111
4700p/2k
ACG1028-
C126
4700p/2k
ACG1028-
C112
4700p/2k
ACG1028-
L101 L102
ATX1021-
Q101
2SK1544
120
C125
3300P/2KV
ACG1008-
R117
150
1W
D105
MA723-T
R118
10
121
RD5.1ESB-T
D106 D107 D108 D109
D110
MA723-T
C106
0.047
C109
0.01
R108
10k
R104
33
R105
33
R106
10
1/2W
R115
8.2k
D103
MTZJ24-T
D104
MTZJ27B-T
R111
680
1/4W
C103
1800p
C104 C105
R109 R110 R112 R113 R114
C107 C108
100/25
1/50
560p 1.5k 8200p 330
E11
CN901
AKM1127-
M.SW+
M.SW-
C905 C906
ACE1144-
0.1u/250V
ACE1138-
0.01u/250V
D905
ERB06-15-T
R901
ACN1128-
2.2
C915
0.01/250
ACG-501-
C914
D901
S1WB(A)60B
C904
HA
47/200
L902
ATX1008-A-T
T901
ATK1133-
IC901
MIP0253SP
BYPASS SOURCE SOURCE DRAIN FB
127
C902
0.1
R903
FL
10k
1/4W
IC903: CONTROL DRIVE IC
STAND-BY
R120
2.2M
1/2W
BCN1022-A-TP
IC902
ON3171-S
IC903
ON3171-S
RY101
ASR1049-
RY102
ASR1049-
IC103
PC817CD
R119
2.2k
D913 D914
D906 D907
D1NS4-T
C908 C907
330/10 330/16
R902
4.7k
P.GND
TP903
ZX-009
C911
47/25
R916
R915
10k
47k
STB9V
TP901
ZX-009
D911
STB5V
ERROR AMP
RELAY DRIVE
1.2V
Q901 Q902 Q903 Q904 Q905
4V
2.6V
2V
0.6V
1.2V
0.6V
D908 R904 R905 R906
220 2.2k 1.5k
VR901
1k
VRTHSGVS102-T
R907
1.8K
C916
0.1
D910
D909
C909
1/50
HZS2BLL-T
R910 R911 R912 R913 R914
47k
C910
47/25
STB5V ADJ.
R909
2.2M
RELAY
TP904
ZX-009
R908
100
AC CLK
L901
2.2
TP905
ZX-009
TP902
ZX-009
STB5V
C912
10/50
R918
4.7k
R917
100
D912
R919
4.7k
8V
0V
8V
Q906
2SA1048
R920
1k
R922
100
Q907
0V
R921
D915
C913
47/25
BR3371XJ30A-T
P.D CIRCUIT
8V
8V
R221
4.7k
D226
Q206
R222
4.7k
7.4V
D224
0.8V
Q205
0.6V
1.2V
R225
47k
D227
C235
47/25
R223
10k
RELAY ON DELAY
D228
HZS4BLL-T
5V
C236
10/50
R227
100
0V
Q207
8V
R226
4.7k
R245
10k
C234
10/50
D229
FUSE OPEN P.D

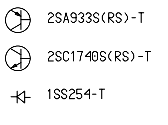
1.RESISTORS
(RS);METAL OXIDE FILM RESISTOR
(RT);CEMENT RESISTOR
(RN);METAL FILM RESISTOR
(FL);NONFLAMMABLE RESISTOR
THE OTHERS;CARBON FILM RESISTOR

Those unspecified ones are of 1/4W
k;kΩ ,M;MΩ ,Unspecified ones are ofΩ

2.CAPACITORS
(YF);CERAMIC CAPACITOR
(SL);CERAMIC CAPACITOR
(HA);HIGH TEMP CHEMICAL CAPACITOR
(YB);CERAMIC CAPACITOR
(M);MILAR CAPACITOR
p;pF,Unspecified ones are of μ F
Capacity / Voltage (;A.C,no mark;D.C)
Unspecified ones are of 50V

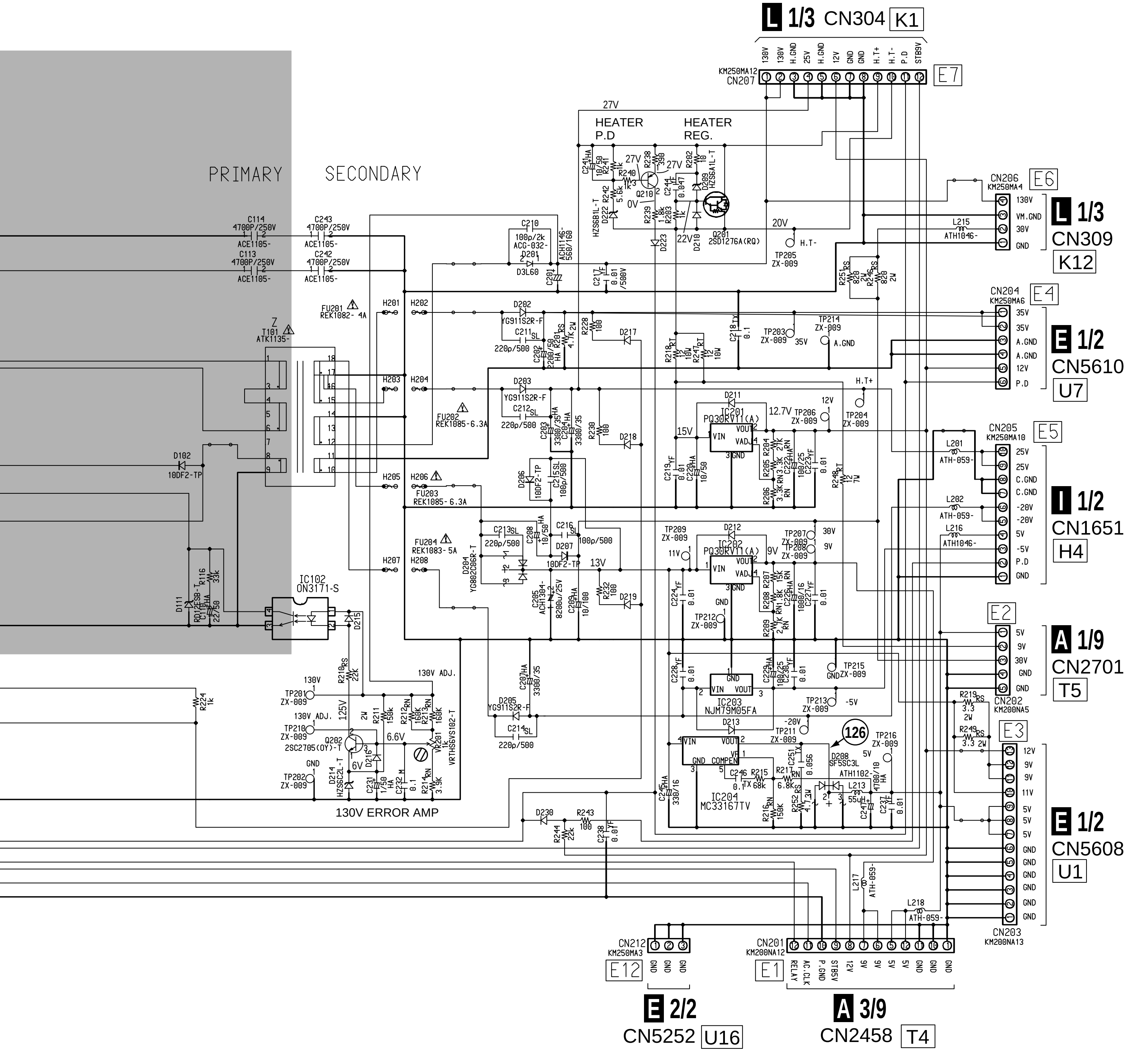
3.The ⚠ mark found on same component parts indicates
the importance of the safety factor of the parts.
Therefore,when replacing,be sure to use parts of identical de-signation.

▨ : CHARGED SECTION


2SA933S(RS)-T
2SC1740S(RS)-T
1SS254-T

- NOTE FOR FUSE REPLACEMENT

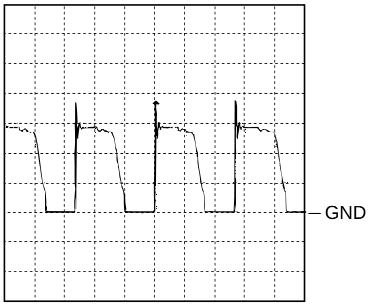
CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY.


L 1/3 CN304 K1
KM250MA12
CN207
E7
130V 130V H.GND 25V H.GND 12V GND GND H.T+ H.T- P.D STB9V
27V
HEATER P.D
HEATER REG.
PRIMARY
SECONDARY
C114 4700P/250V ACE1105-
C243 4700P/250V ACE1105-
C113 4700P/250V ACE1105-
C242 4700P/250V ACE1105-
C210 100p/2k ACG-032-
D201 D3L60
ACH1146-560/160
C201
C217 0.01/500V
C241 10/50
R241 1k
R240 3.3
R242 5.6k
D222 HZS6B1L-T
R238 390
Q210
0V
27V
R239 1.8k
R203 1k
C244 0.047
R202 10
D209 HZS6A1L-T
D223
D210
22V
Q201 2SD1276A(RQ)
20V
TP205 ZX-009
H.T-
CN206 KM250MA4 E6
130V VM.GND 30V GND
L 1/3 CN309 K12
L215 ATH1046-
R251 820 2W
R246 820 2W
CN204 KM250MA6 E4
35V 35V A.GND A.GND 12V P.D
E 1/2 CN5610 U7
FU201 REK1082- 4A
H201 H202
T101 ATK1135-
D202 YG911S2R-F
C211 220p/500
C202 2200/50
R201 4.7k 2W
R228 100
D217
R218 1k
R247 1k
TP203 ZX-009
35V
TP214 ZX-009
A.GND
C218 0.1
H203 H204
D203 YG911S2R-F
C212 220p/500
FU202 REK1085-6.3A
C203 3300/35
C204 3300/35
R230 100
D218
D211
IC201 PQ30RV11(A)
VIN VOUT VADJ GND
15V
12.7V
TP206 ZX-009
12V
TP204 ZX-009
H.T+
R204 2.4k
R205 3.3k
R206
C222 10/25
C223 0.01
C219 0.01
C220 10/50
R248 2.2 1W
CN205 KM250MA10 E5
L201 ATH-059-
25V 25V C.GND C.GND -20V -20V 5V -5V P.D GND
L202 ATH-059-
L216 ATH1046-
I 1/2 CN1651 H4
D102 10DF2-TP
H205 H206
D206 10DF2-TP
C215 100p/500
FU203 REK1085-6.3A
FU204 REK1083-5A
H207 H208
D204 YG802C06R-T
C213 220p/500
C208 10/50
C216 100p/500
D207 10DF2-TP
13V
C205 ACH1304- 8200u/25V
C209 10/100
R232 100
D219
TP209 ZX-009
11V
D212
IC202 PQ30RV11(A)
9V
TP207 ZX-009
TP208 ZX-009
30V
9V
R207 1.5k
R208 1.8k
C226 10/16
C227 0.01
C224 0.01
TP212 ZX-009
GND
R209
D111
R116 33k
RD12ESB-T
C118 22/50
IC102 ON3171-S
D215
E2
5V 9V 30V GND GND
A 1/9 CN2701 T5
R219 3.3 2W
R249 3.3 2W
CN202 KM200NA5
E3
12V 9V 9V 11V 5V 5V 5V GND GND GND GND GND GND
E 1/2 CN5608 U1
CN203 KM200NA13
R224 1k
TP201 ZX-009
130V
R210 22k
130V ADJ.
C207 3300/35
D205 YG911S2R-F
C214 220p/500
C228 0.01
IC203 NJM79M05FA
C229 100/25
C230 0.01
TP215 ZX-009
TP213 ZX-009
-5V
D213
-20V
TP211 ZX-009
125V
R211 150k
R212 68k
R213 150k
TP210 ZX-009
Q202 2SC2705(OY)-T
6.6V
6V
D216
VR201 1k VRTH56VS102-T
TP202 ZX-009
D214 HZS6C2L-T
C231 1/50
C232 0.1
R214 3.9k
130V ERROR AMP
IC204 MC33167TV
VIN VOUT GND COMPEN VFB
C246 0.1
R215 68k
R217 6.8k
C251 0.056
126
TP216 ZX-009
D208 SF5SC3L
5V
ATH1102
L213 55uH
C247 4700/10
C237 0.01
C245 330/16
R216 150k
R252 4.7 1W
D230
R243 100
R244 22k
C238 0.01
L217 ATH-059-
L218 ATH-059-
CN212 KM250MA3
GND GND GND
E12
CN201 KM200NA12
E1
RELAY AC.CLK P.GND STB5V 12V 9V 9V 5V 5V GND GND GND
E 2/2 CN5252 U16
A 3/9 CN2458 T4

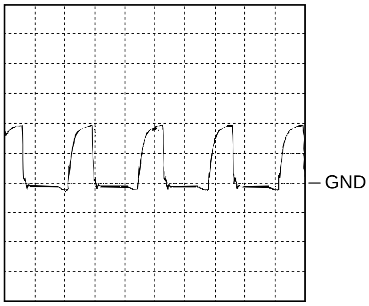
P POWER SUPPLY ASSY

Input signal
Video signal : EIA full color-bar
Picture quality : Standard
Range :DC range (Unless otherwise noted)

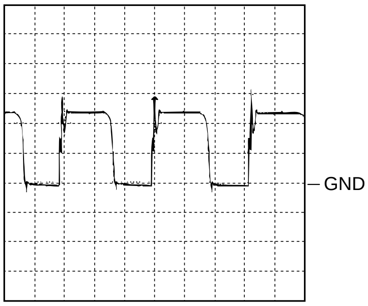
(120) **Q101 Drain**
V: 100V/div. H: 10µsec/div.



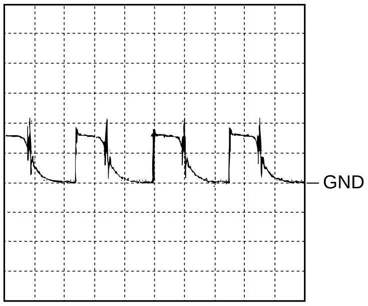
(121) **Q101 Gate**
V: 10V/div. H: 10µsec/div.



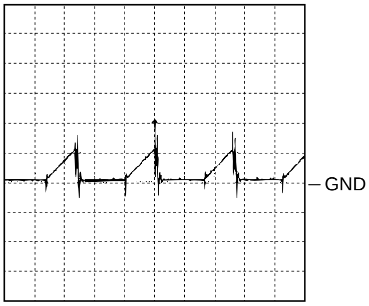
(122) **IC101 pin 1**
V: 1V/div. H: 10µsec/div.



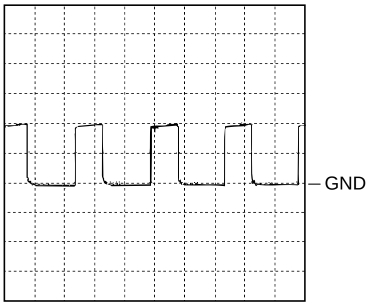
(123) **IC101 pin 2**
V: 500mV/div. H: 10µsec/div.



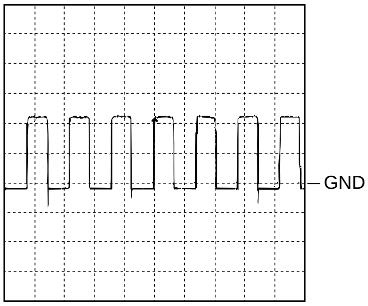
(124) **IC101 pin 3**
V: 500mV/div. H: 10µsec/div.



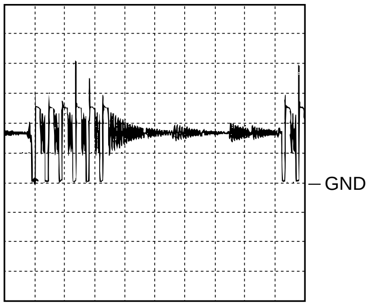
(125) **IC101 pin 6**
V: 10V/div. H: 10µsec/div.



(126) **IC204 pin 2**
V: 5V/div. H: 10µsec/div.

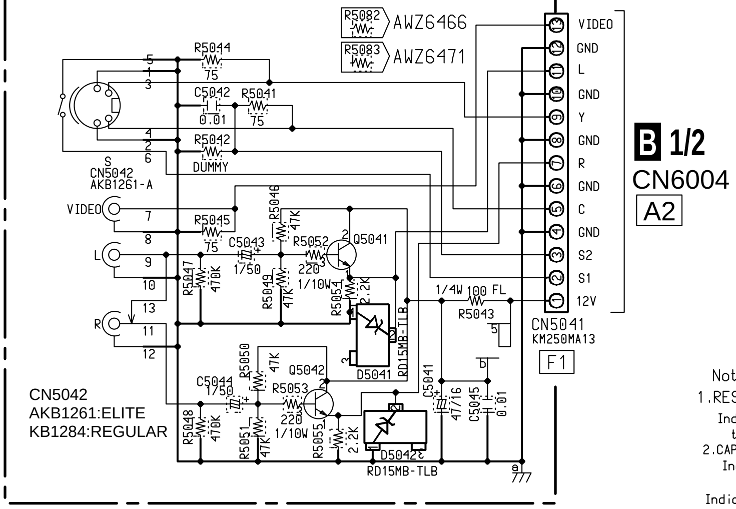


(127) **IC901 pin 5**
V: 100V/div. H: 50µsec/div.



3.38 FRONT INPUT, FRONT CONTROL and LED DPO ASSYS

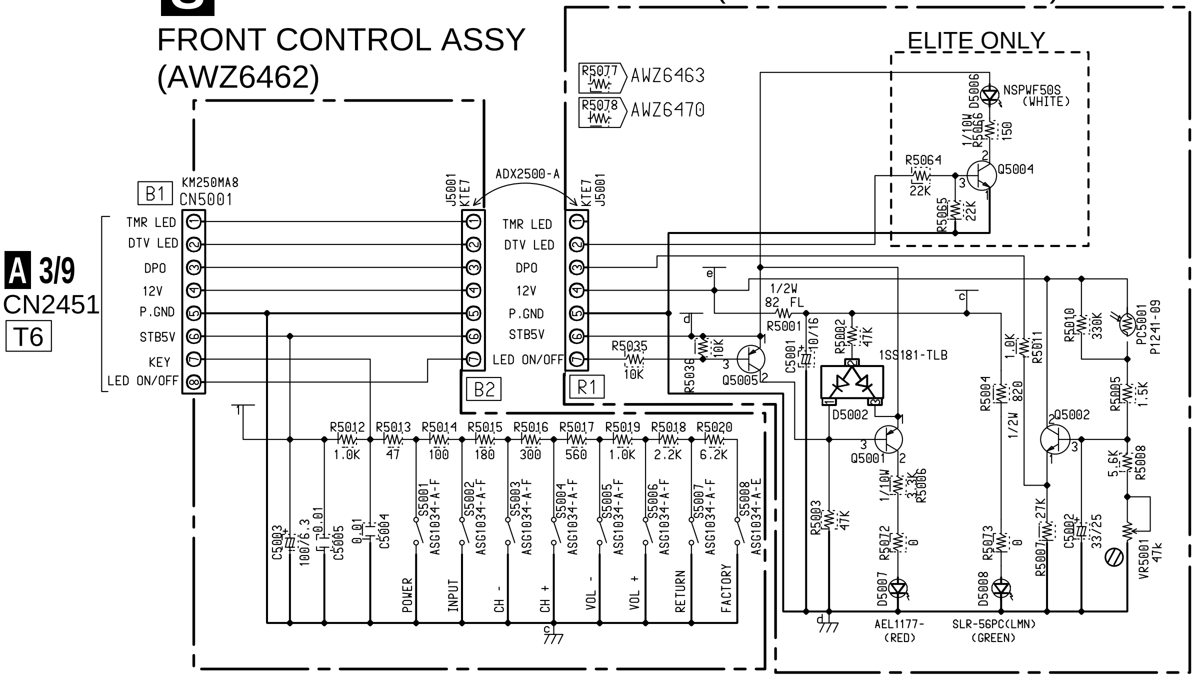
R FRONT INPUT ASSY
(AWZ6466 : ELITE)
(AWZ6471 : REGULAR)


R5082 AWZ6466
R5083 AWZ6471
R5044 75
C5042 0.01
R5041 75
R5042 DUMMY
S
CN5042
AKB1261-A
VIDEO
L
R
R5045 75
R5046 47K
C5043 1750
R5052 220 1/10W
Q5041
R5047 470K
R5049 47K
R5054 2.2K
RD15MB-TLB
D5041
1/4W 100 FL
R5043
C5044 1750
R5050 47K
Q5042
R5053 220 1/10W
R5048 470K
R5051 47K
R5055 2.2K
D5042
RD15MB-TLB
C5041 47/16
C5045 0.01
CN5042
AKB1261:ELITE
KB1284:REGULAR
CN5041
KM250MA13
F1
VIDEO
GND
L
GND
Y
GND
R
GND
C
GND
S2
S1
12V
B 1/2
CN6004
A2

Notes
1.RESISTORS
Indicated in Ω
tolerance unless otherwise noted k Ω
2.CAPASITORS
Indicated in capacity(uF)/Voltage unless
otherwise noted p pF
Indication without voltage is 50V except electrolytic capacitor.

T LED DPO ASSY
(AWZ6463 : ELITE)
(AWZ6470 : REGULAR)

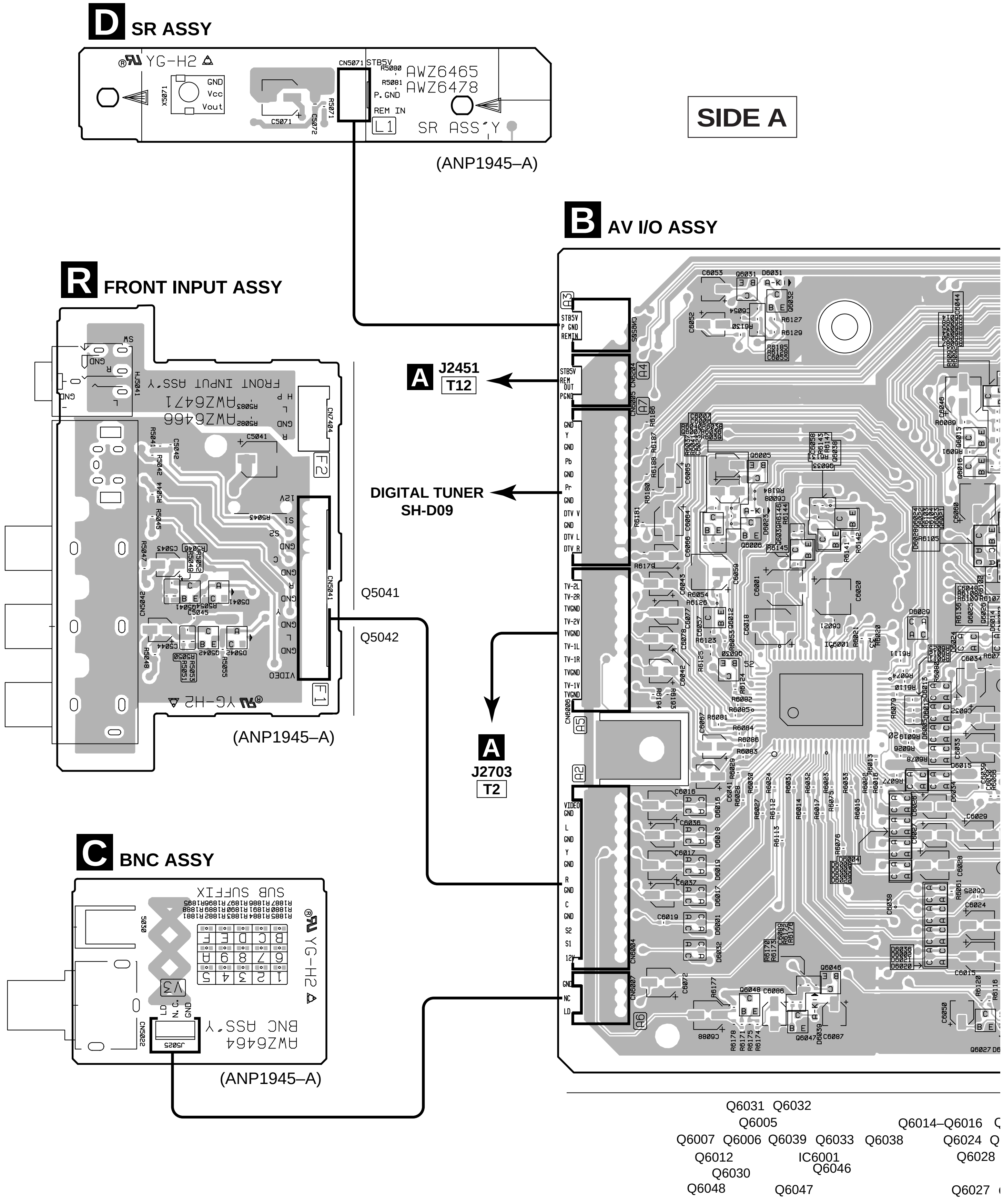
S FRONT CONTROL ASSY
(AWZ6462)


A 3/9
CN2451
T6
B1
KM250MA8
CN5001
TMR LED
DTV LED
DPO
12V
P.GND
STB5V
KEY
LED ON/OFF
J5001
KTE7
ADX2500-A
B2
R1
R5077 AWZ6463
R5078 AWZ6470
ELITE ONLY
NSPWF50S (WHITE)
D5006
R5066 1/10W 150
R5064 22K
Q5004
R5065 22K
1/2W 82 FL
R5001
R5035 10K
R5036 10K
Q5005
C5001 10/16
R5002 47K
1SS181-TLB
D5002
Q5001
R5006 3.3K 1/10W
R5004 820 1/2W
R5011 1.0K
R5010 330K
PC5001 P1241-09
R5005 1.5K
Q5002
R5008 5.6K
R5003 47K
R5072 0
R5073 0
R5007 27K
C5002 33/25
VR5001 47k
D5007
AEL1177-(RED)
D5008
SLR-56PC(LMN) (GREEN)
R5012 1.0K
R5013 47
R5014 100
R5015 180
R5016 300
R5017 560
R5019 1.0K
R5018 2.2K
R5020 6.2K
C5003 100/6.3
C5005 0.01
C5004 0.01
S5001 ASG1034-A-F POWER
S5002 ASG1034-A-F INPUT
S5003 ASG1034-A-F CH -
S5004 ASG1034-A-F CH +
S5005 ASG1034-A-F VOL -
S5006 ASG1034-A-F VOL +
S5007 ASG1034-A-F RETURN
S5008 ASG1034-A-E FACTORY

FRONT CONTROL ASSY
S5001 : STANDBY/ON
S5002 : INPUT SELECTOR
S5003 : CHANNEL –
S5004 : CHANNEL +
S5005 : VOLUME –
S5006 : VOLUME +
S5007 : RETURN
S5008 : FACTORY ADJ

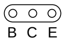
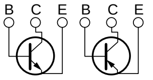
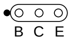
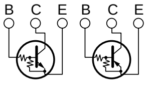
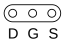
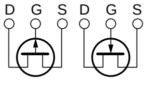
4. PCB CONNECTION DIAGRAM

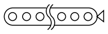
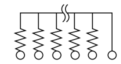
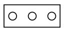
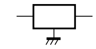
4.1 AV I/O ASSY, SR ASSY, FRONT INPUT ASSY and BNC ASSY


D SR ASSY
YG-H2
X5071
GND
Vcc
Vout
C5071
C5072
R5071
CN5071 STB5V
R5080
R5081
P.GND
REM IN
AWZ6465
AWZ6478
L1
SR ASS'Y
(ANP1945–A)
SIDE A
B AV I/O ASSY
R FRONT INPUT ASSY
FRONT INPUT ASS'Y
AWZ6471
AWZ6466
JA5041
CN7404
CN5041
F2
F1
12V
S1
S2
GND
C
GND
R
GND
Y
GND
L
GND
VIDEO
YG-H2
(ANP1945–A)
Q5041
Q5042
A J2451 T12
DIGITAL TUNER SH-D09
A J2703 T2
STB5V
P GND
REMIN
CN5003
A3
STB5V
REM OUT
PGND
CN6005 CN6204
A4
A7
GND
Y
GND
Pb
GND
Pr
GND
DTV V
GND
DTV L
DTV R
TV-2L
TV-2R
TVGND
TV-2V
TVGND
TV-1L
TV-1R
TVGND
TV-1V
TVGND
CN6006
A5
A2
VIDEO
GND
L
GND
Y
GND
R
GND
C
GND
S2
S1
12V
CN6004
GND
NC
LD
CN6007
A6
IC6001
C BNC ASSY
SUB SUFFIX
YG-H2
V3
BNC ASS'Y
AWZ6464
CN5022
J5025
LD
N.C.
GND
(ANP1945–A)
Q6031 Q6032
Q6005
Q6007 Q6006 Q6039 Q6033 Q6038
Q6012
Q6030
Q6048
IC6001
Q6046
Q6047
Q6014–Q6016
Q6024
Q6028
Q6027

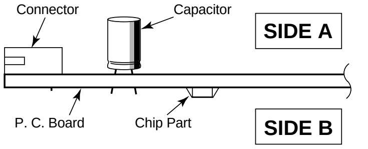
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor

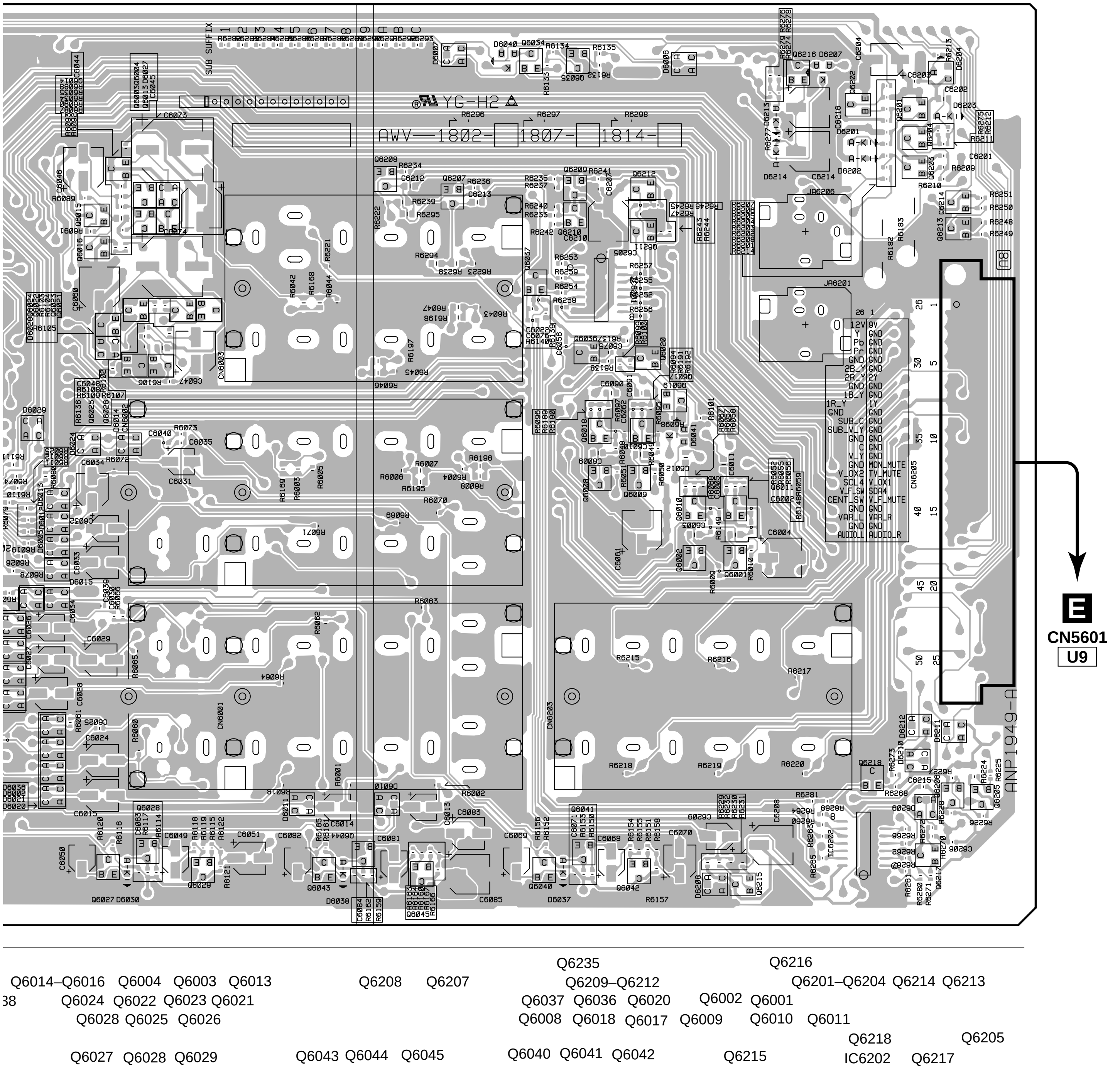
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. Viewpoint of PCB diagrams


Connector
Capacitor
SIDE A
P. C. Board
Chip Part
SIDE B

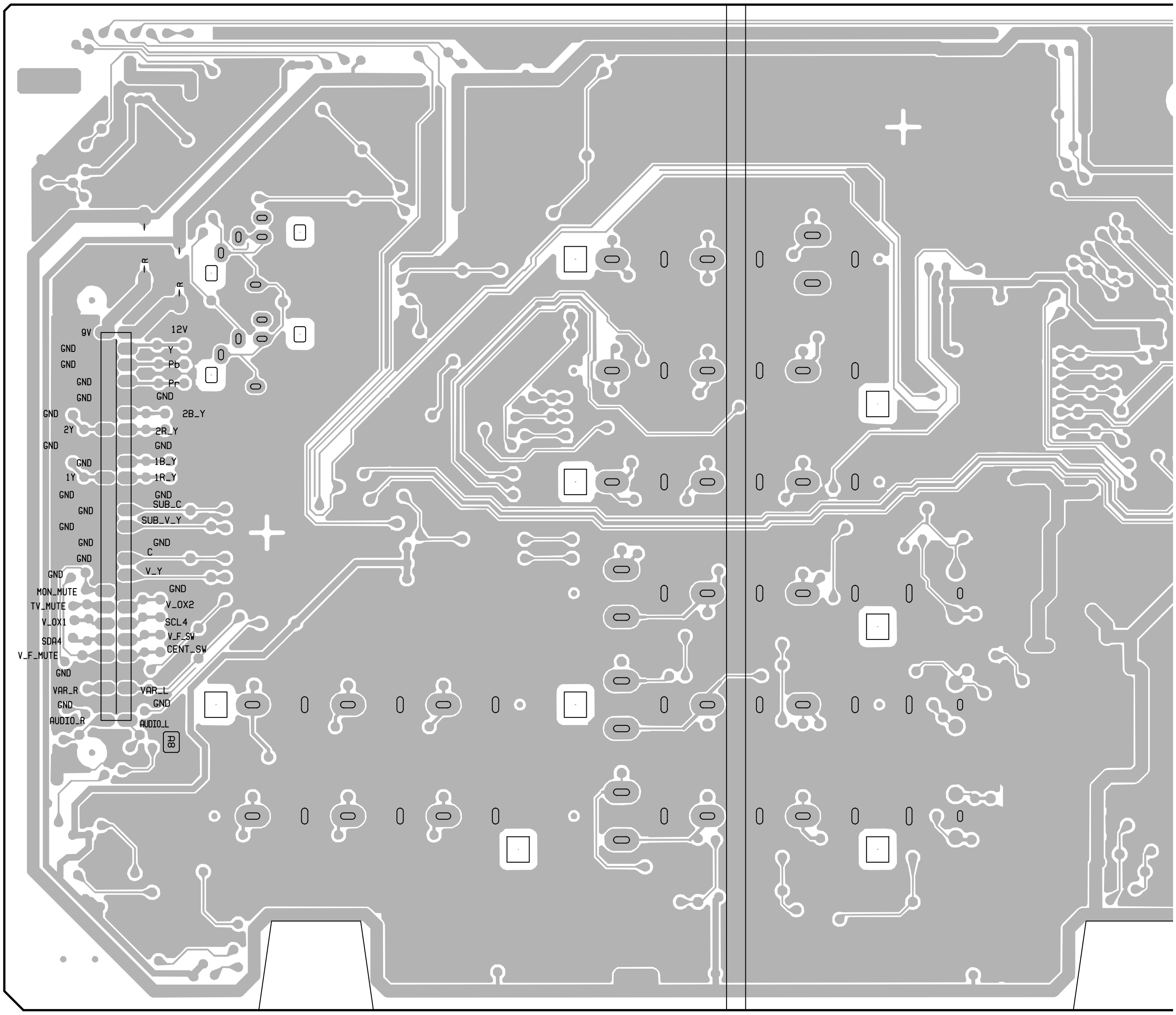
SIDE A

(ANP1949–A)


AWV-1802- 1807- 1814-
YG-H2
SUB SUFFIX
ANP1949-A
CN6205
JA6206
JA6201
CN6001
CN6003
CN6203
E
CN5601
U9
Q6014–Q6016 Q6004 Q6003 Q6013
Q6024 Q6022 Q6023 Q6021
Q6028 Q6025 Q6026
Q6027 Q6028 Q6029
Q6208 Q6207
Q6043 Q6044 Q6045
Q6235
Q6209–Q6212
Q6037 Q6036 Q6020
Q6008 Q6018 Q6017 Q6009
Q6040 Q6041 Q6042
Q6002 Q6001
Q6010 Q6011
Q6215
Q6216
Q6201–Q6204 Q6214 Q6213
Q6218
IC6202
Q6217
Q6205

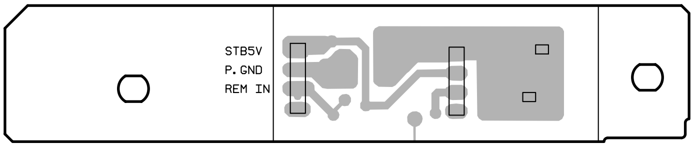
SIDE B

B AV I/O ASSY

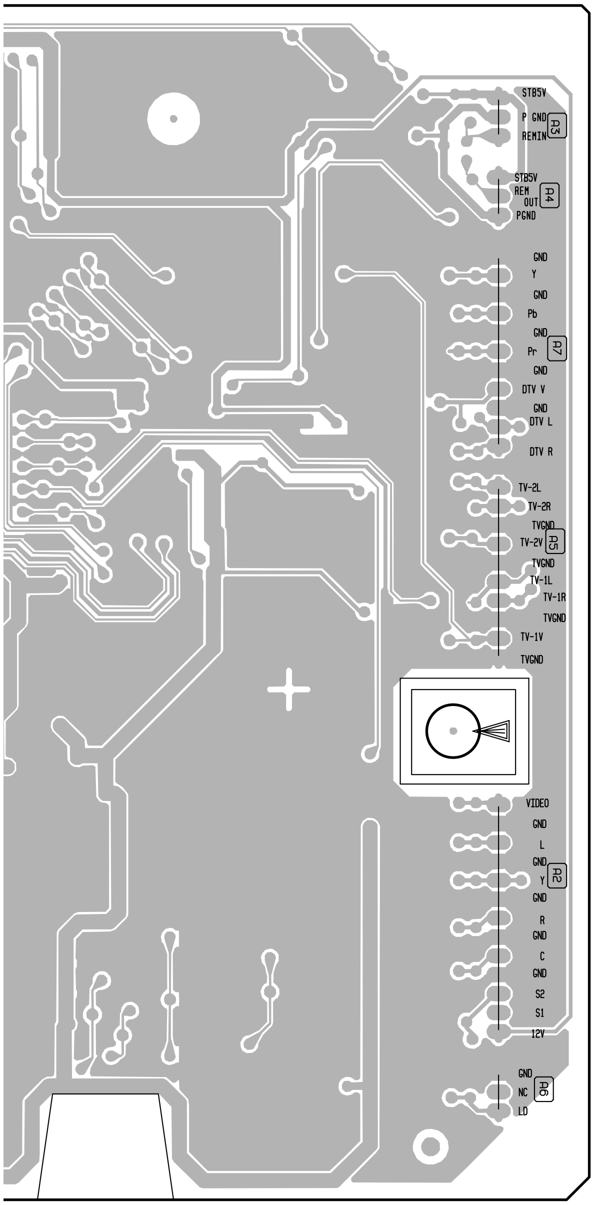

9V
GND
GND
GND
GND
GND
2Y
GND
GND
1Y
GND
GND
GND
GND
GND
GND
MON_MUTE
TV_MUTE
V_OX1
SDA4
V_F_MUTE
GND
VAR_R
GND
AUDIO_R
12V
Y
Pb
Pr
GND
2B_Y
2R_Y
GND
1B_Y
1R_Y
GND
SUB_C
SUB_V_Y
GND
C
V_Y
GND
V_OX2
SCL4
V_F_SW
CENT_SW
VAR_L
GND
AUDIO_L
A8

SIDE B

D SR ASSY

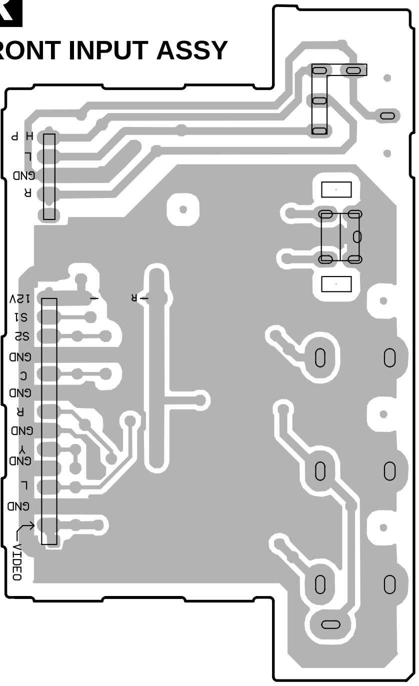

STB5V
P.GND
REM IN

(ANP1945–A)


STB5V
P GND
REMIN
A3
STB5V
REM
OUT
PGND
A4
GND
Y
GND
Pb
GND
Pr
A7
GND
DTV V
GND
DTV L
DTV R
TV-2L
TV-2R
TVGND
TV-2V
A5
TVGND
TV-1L
TV-1R
TVGND
TV-1V
TVGND
VIDEO
GND
L
GND
A2
Y
GND
R
GND
C
GND
S2
S1
12V
GND
NC
A6
LD

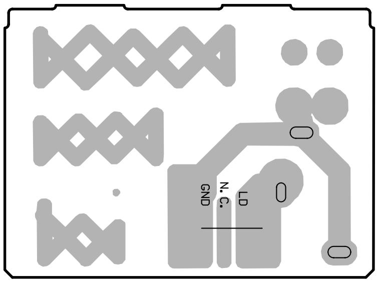
(ANP1949–A)

R FRONT INPUT ASSY


H P
L
GND
R
12V
S1
S2
GND
C
GND
R
GND
Y
GND
L
GND
VIDEO
L
R

(ANP1945–A)

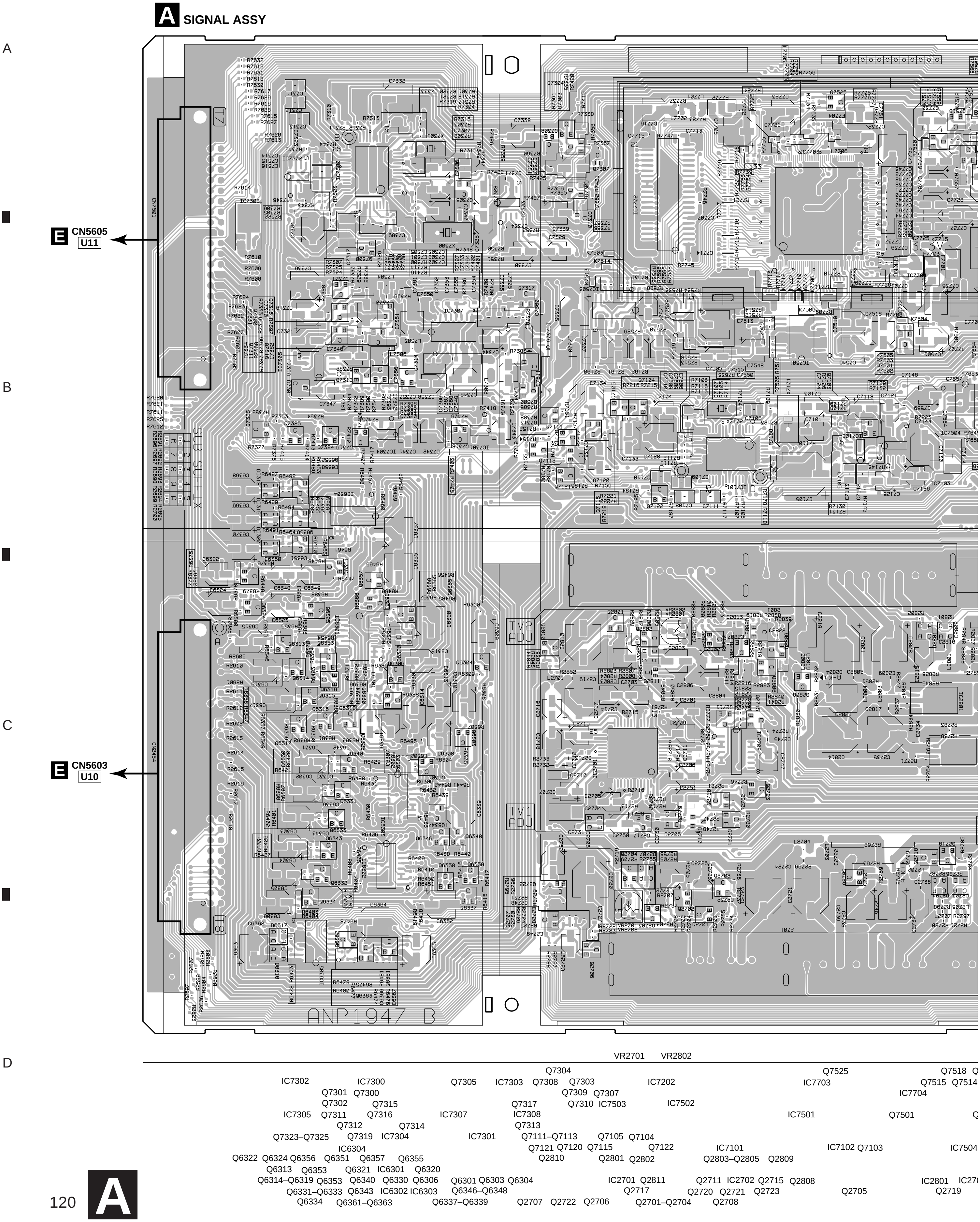
C BNC ASSY



(ANP1945–A)

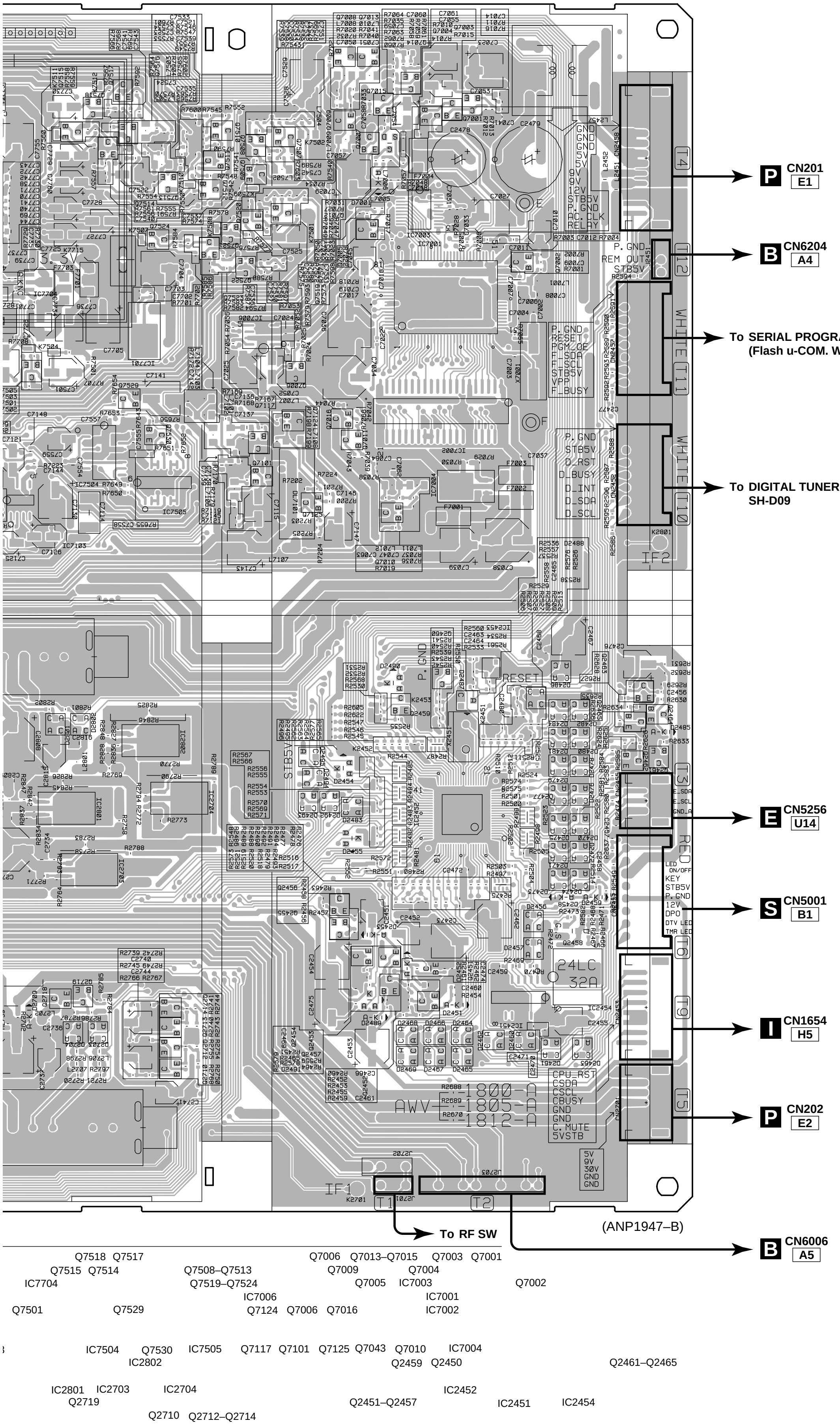
4.2 SIGNAL ASSY

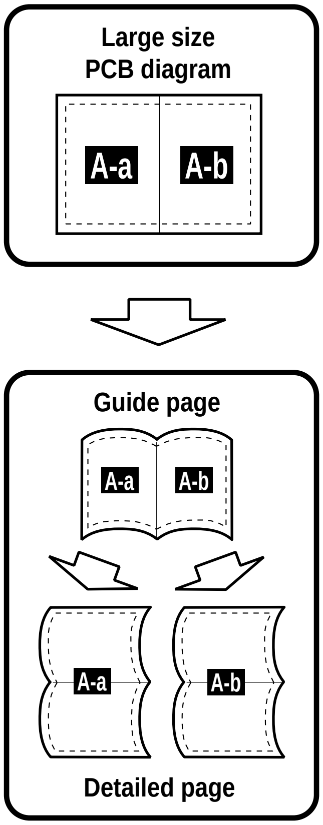
A-a


A SIGNAL ASSY
A
B
C
D
E CN5605 U11
E CN5603 U10
CN7501
CN2454
SUB SUFFIX
TV2 ADJ
TV1 ADJ
ANP1947-B
VR2701 VR2802
Q7304
IC7302 IC7300 Q7305 IC7303 Q7308 Q7303 IC7202 Q7525 Q7518
Q7301 Q7300 Q7309 Q7307 IC7703 Q7515 Q7514
Q7302 Q7315 Q7317 Q7310 IC7503 IC7502 IC7704
IC7305 Q7311 Q7316 IC7307 IC7308 IC7501 Q7501
Q7312 Q7314 Q7313
Q7323–Q7325 Q7319 IC7304 IC7301 Q7111–Q7113 Q7105 Q7104
IC6304 Q7121 Q7120 Q7115 Q7122 IC7101 IC7102 Q7103 IC7504
Q6322 Q6324 Q6356 Q6351 Q6357 Q6355 Q2810 Q2801 Q2802 Q2803–Q2805 Q2809
Q6313 Q6353 Q6321 IC6301 Q6320
Q6314–Q6319 Q6353 Q6340 Q6330 Q6306 Q6301 Q6303 Q6304 IC2701 Q2811 Q2711 IC2702 Q2715 Q2808 IC2801
Q6331–Q6333 Q6343 IC6302 IC6303 Q6346–Q6348 Q2717 Q2720 Q2721 Q2723 Q2705 Q2719
Q6334 Q6361–Q6363 Q6337–Q6339 Q2707 Q2722 Q2706 Q2701–Q2704 Q2708

A-b

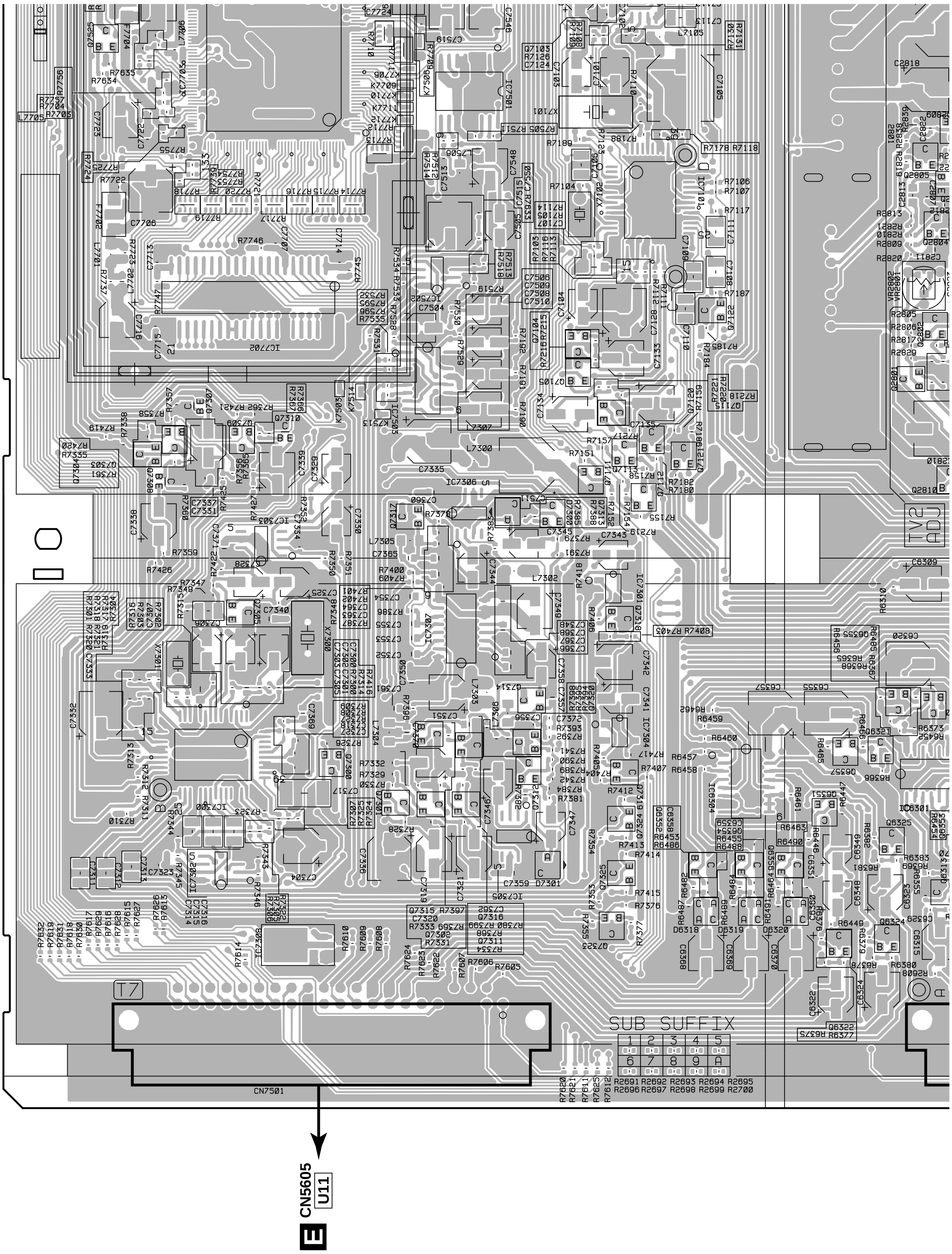
SIDE A


CN201
P
E1
CN6204
B
A4
To SERIAL PROGRAMER
(Flash u-COM. Writer)
To DIGITAL TUNER
SH-D09
CN5256
E
U14
CN5001
S
B1
CN1654
I
H5
CN202
P
E2
To RF SW
(ANP1947–B)
CN6006
B
A5
Q7518 Q7517
Q7515 Q7514
IC7704
Q7508–Q7513
Q7519–Q7524
Q7006 Q7013–Q7015 Q7003 Q7001
Q7009 Q7004
Q7005 IC7003
Q7002
IC7006
IC7001
Q7501
Q7529
Q7124 Q7006 Q7016
IC7002
IC7504 Q7530 IC7505 Q7117 Q7101 Q7125 Q7043 Q7010 IC7004
IC2802
Q2459 Q2450
Q2461–Q2465
IC2801 IC2703 IC2704
Q2719
IC2452
Q2451–Q2457
IC2451 IC2454
Q2710 Q2712–Q2714

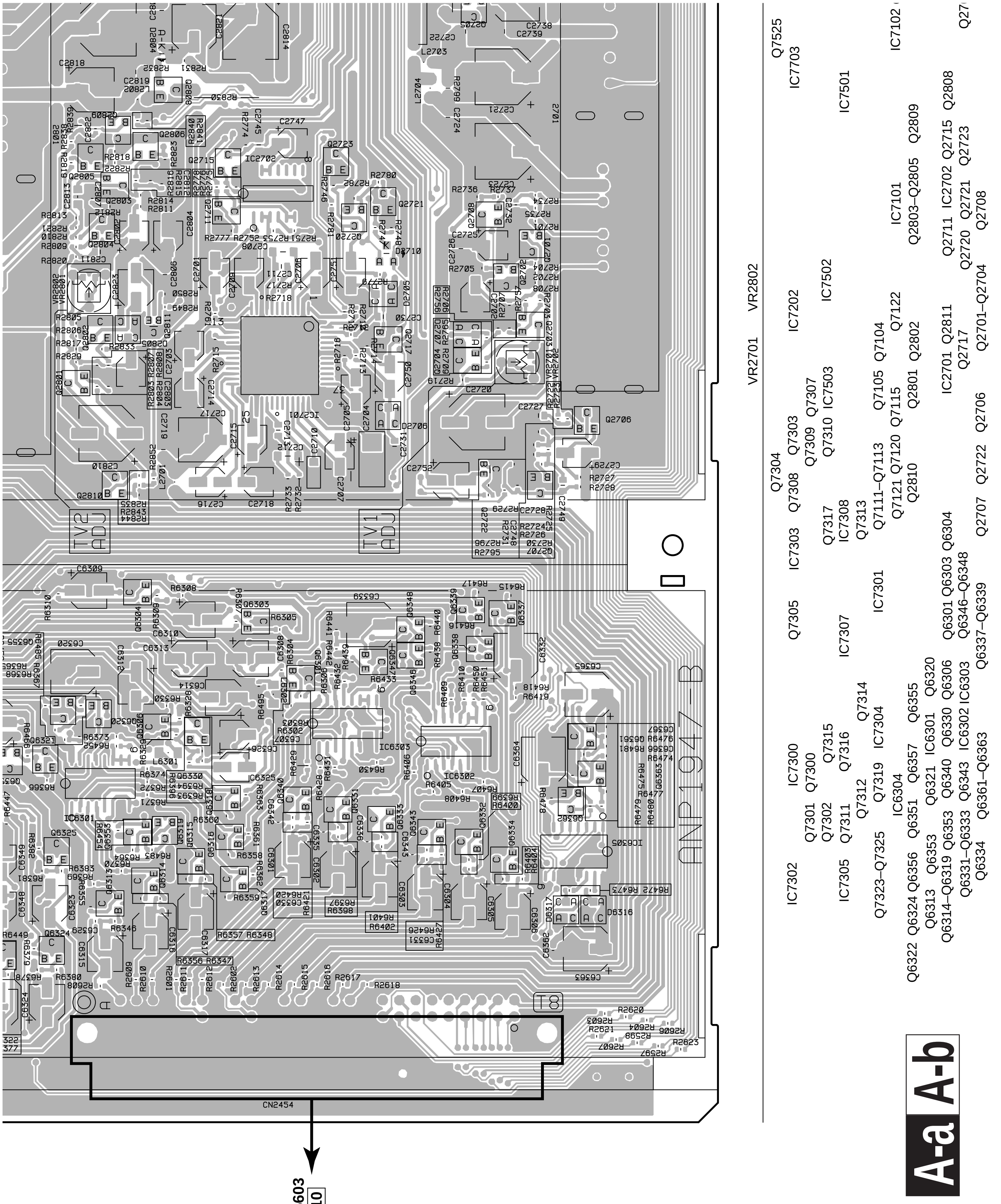

Large size
PCB diagram
A-a
A-b
Guide page
A-a
A-b
A-a
A-b
Detailed page

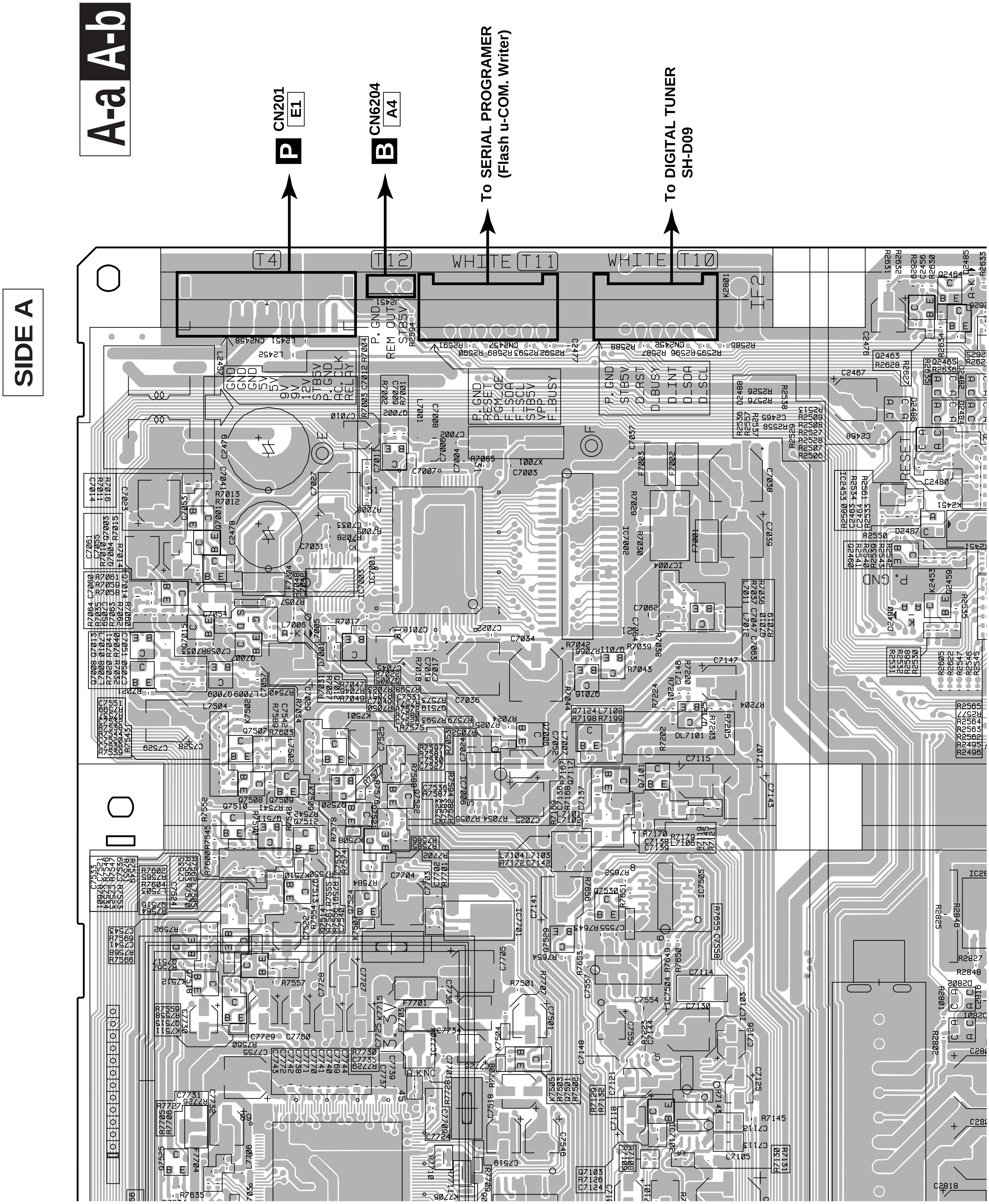
SIDE A

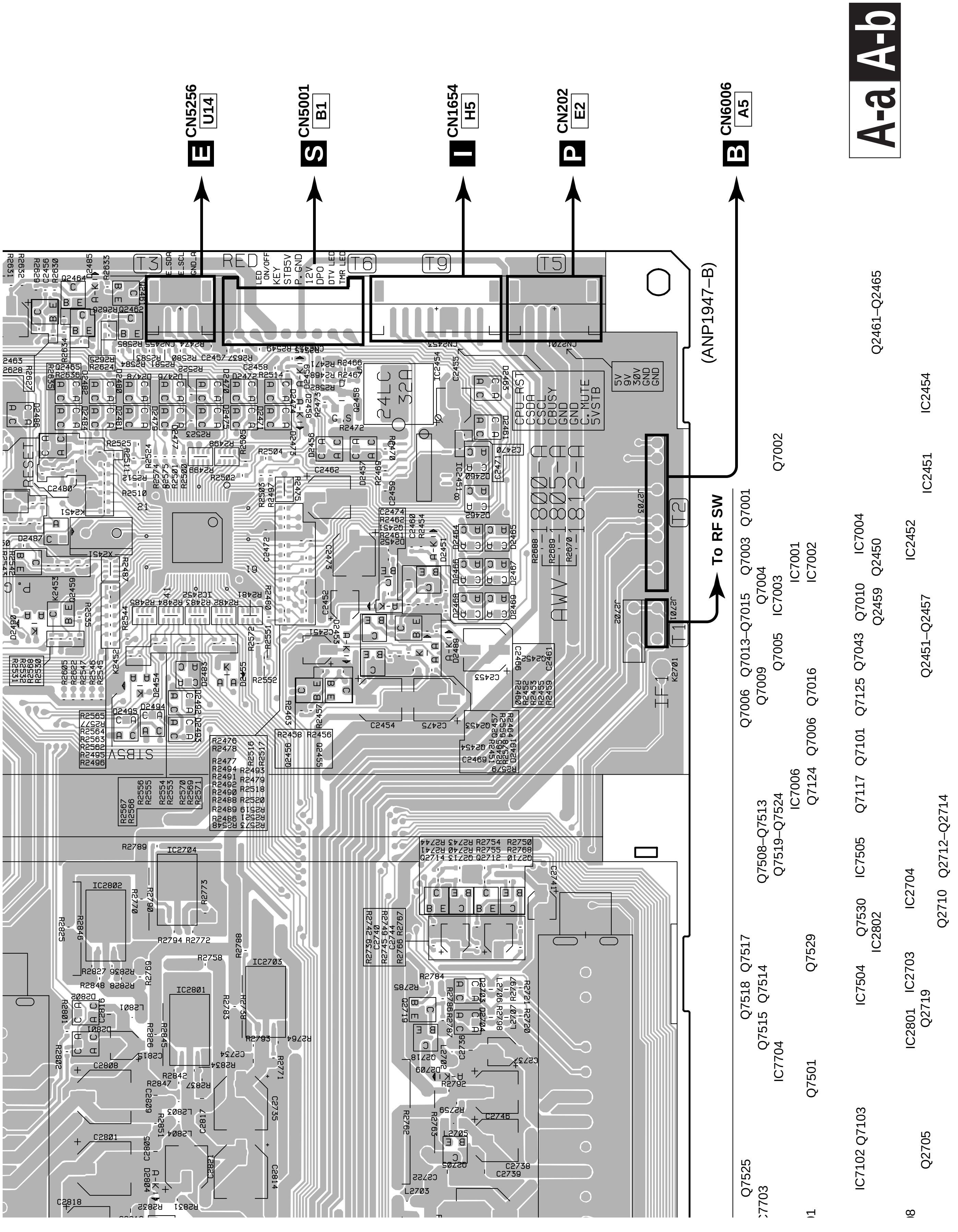
A-a A-b


CN7501
T7
SUB SUFFIX
1 2 3 4 5
6 7 8 9 A
R2691 R2692 R2693 R2694 R2695
R2696 R2697 R2698 R2699 R2700
R7620 R7621 R7611 R7625 R7612
TV2 ADJ
IC7702
IC7501
IC7306
IC7301
IC7303
IC7307
IC7308
IC7305
IC7304
IC6304
IC6301
IC7101
X7101
X7301
X7300
L7300
L7302
L7303
L7304
L7305
L7307
L7105
CN5605
U11
E

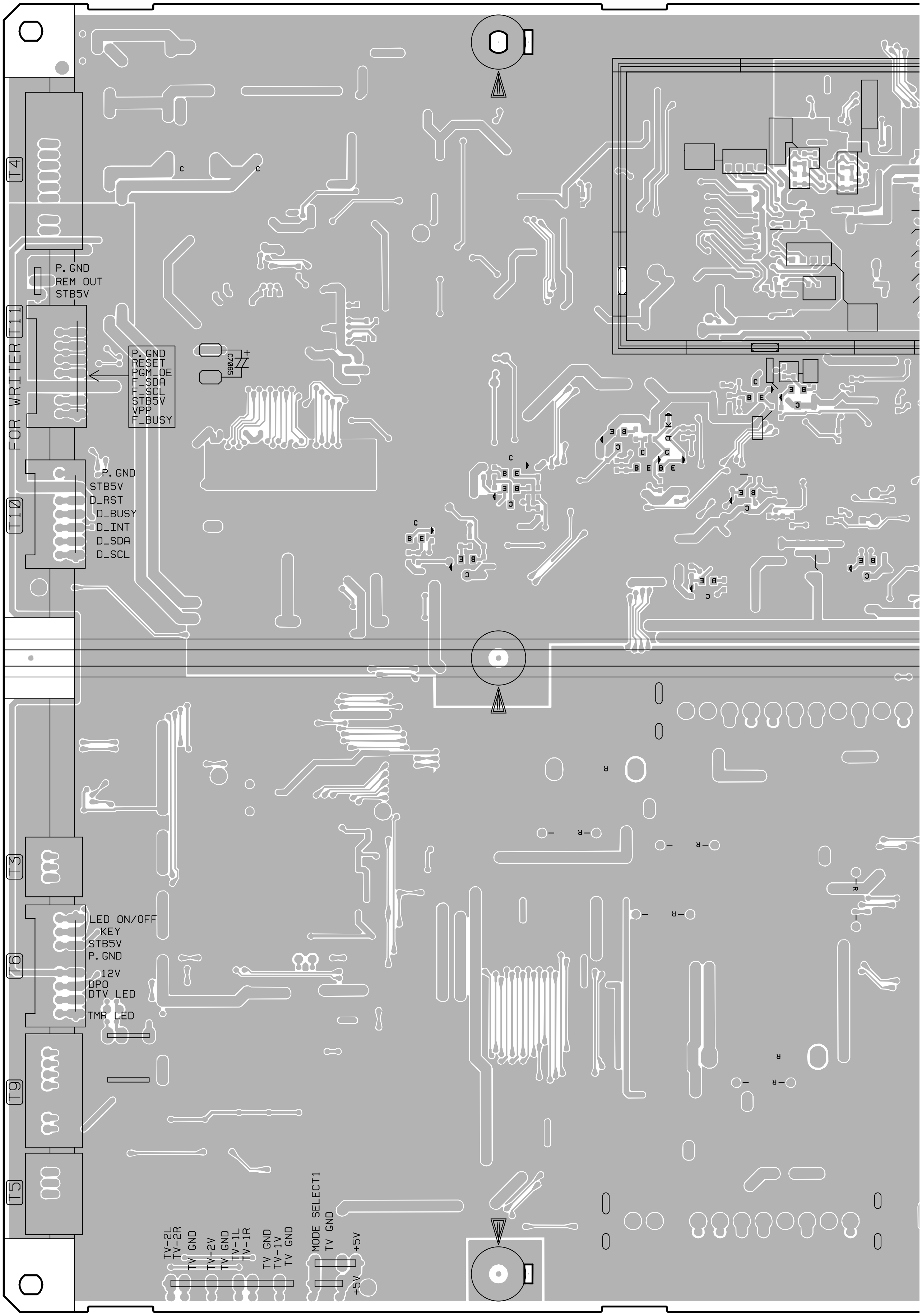
A SIGNAL ASSY


VR2701 VR2802
Q7304 Q7525
IC7302 IC7300 Q7305 IC7303 Q7308 Q7303 IC7202 IC7703
Q7301 Q7300 Q7309 Q7307
Q7302 Q7315 Q7317 Q7310 IC7503 IC7502
IC7305 Q7311 Q7316 IC7307 IC7308 IC7501
Q7312 Q7314 Q7313
Q7323–Q7325 Q7319 IC7304 IC7301 Q7111–Q7113 Q7105 Q7104
IC6304 Q7121 Q7120 Q7115 Q7122 IC7101 IC7102
Q6322 Q6324 Q6356 Q6351 Q6357 Q6355 Q2810 Q2801 Q2802 Q2803–Q2805 Q2809
Q6313 Q6353 Q6321 IC6301 Q6320
Q6314–Q6319 Q6353 Q6340 Q6330 Q6306 Q6301 Q6303 Q6304 IC2701 Q2811 Q2711 IC2702 Q2715 Q2808
Q6331–Q6333 Q6343 IC6302 IC6303 Q6346–Q6348 Q2717 Q2720 Q2721 Q2723
Q6334 Q6361–Q6363 Q6337–Q6339 Q2707 Q2722 Q2706 Q2701–Q2704 Q2708
TV2 ADJ
TV1 ADJ
ANP1947-B
IC2701
IC6303
IC6302
IC6301
IC6325
IC6305
CN2454
E CN5603 U10
A-a A-b

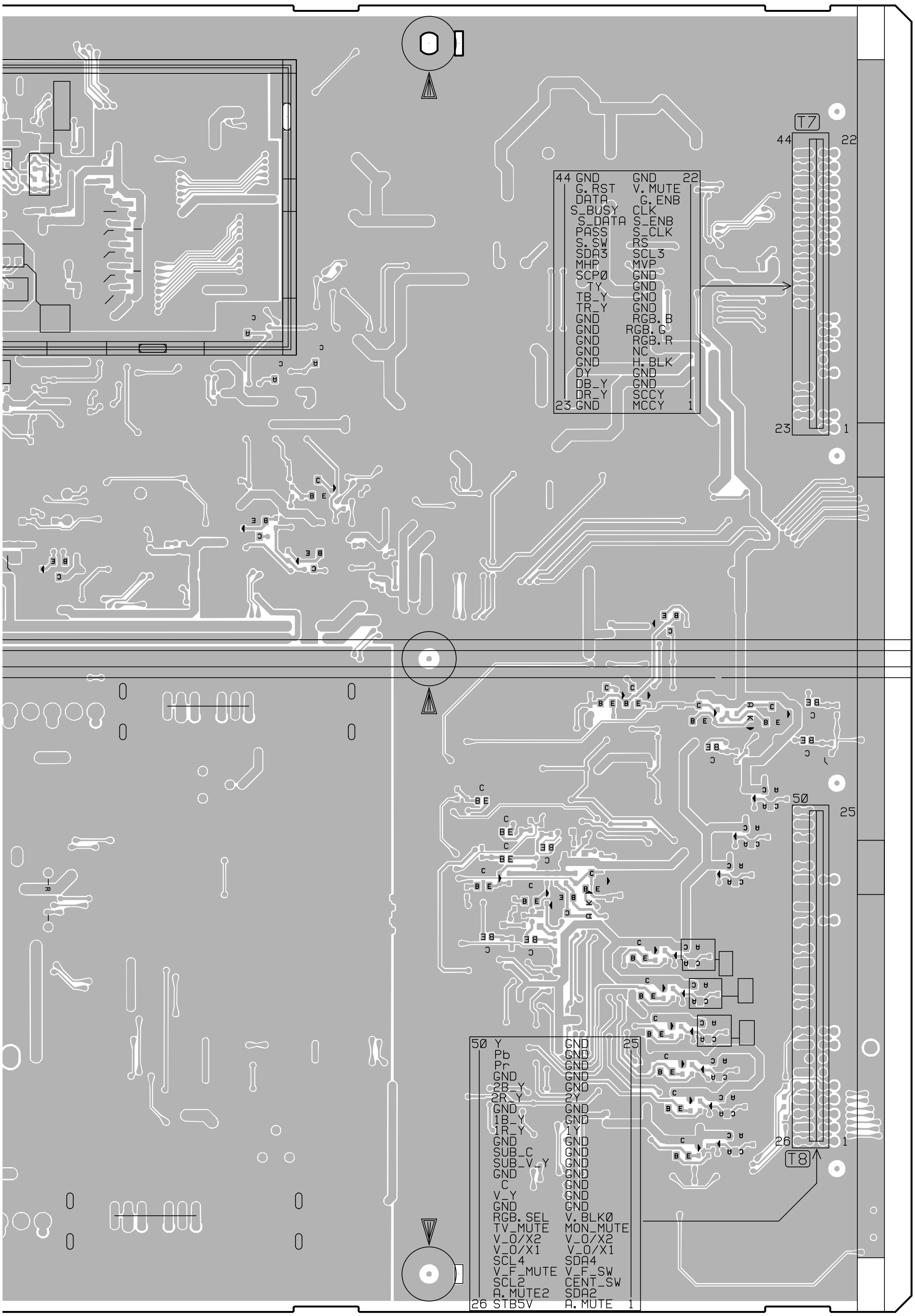

A-a A-b
SIDE A
P CN201 E1
B CN6204 A4
To SERIAL PROGRAMER (Flash u-COM. Writer)
To DIGITAL TUNER SH-D09
T4
T12
WHITE T11
WHITE T10
CN2458
GND
GND
GND
5V
9V
9V
12V
STB5V
P.GND
AC.CLK
RELAY
P.GND
REM OUT
STB5V
CN2457
P.GND
RESET
PGM_OE
F_SDA
F_SCL
STB5V
VPP
F_BUSY
CN2452
P.GND
STB5V
D_RST
D_BUSY
D_INT
D_SDA
D_SCL
IC7001
IC7002
IC7003
IC7004
IC7006
IC7701
IC7505
IC7103
RESET
P.GND
A
B
C
D


A-a A-b
E CN5256 U14
S CN5001 B1
I CN1654 H5
P CN202 E2
B CN6006 A5
(ANP1947–B)
To RF SW
T3
T6
T9
T5
T1
T2
IF1
RED
24LC 32A
AWV-1800-A
-1805-A
-1812-A
CPU_RST
CSDA
CSCL
CBUSY
GND
GND
C.MUTE
5VSTB
5V
9V
30V
GND
GND
STB5V
RESET
IC2704
IC2802
IC2801
IC2703
Q2461–Q2465
IC2454
Q7002
IC2451
Q7001
Q7003
Q7004
IC7001
IC7002
IC7004
IC2452
Q2450
Q7013–Q7015
IC7003
Q7010
Q2459
Q7005
Q7043
Q2451–Q2457
Q7006
Q7009
Q7016
Q7125
Q7006
Q7101
Q7508–Q7513
Q7519–Q7524
IC7006
Q7124
Q7117
IC7505
Q2712–Q2714
IC2704
Q7517
Q7530
IC2802
Q2710
Q7529
Q7518
Q7514
IC7504
IC2703
Q7515
Q2719
IC2801
IC7704
Q7501
IC7102
Q7103
Q2705
Q7525
C7703

A SIGNAL ASSY

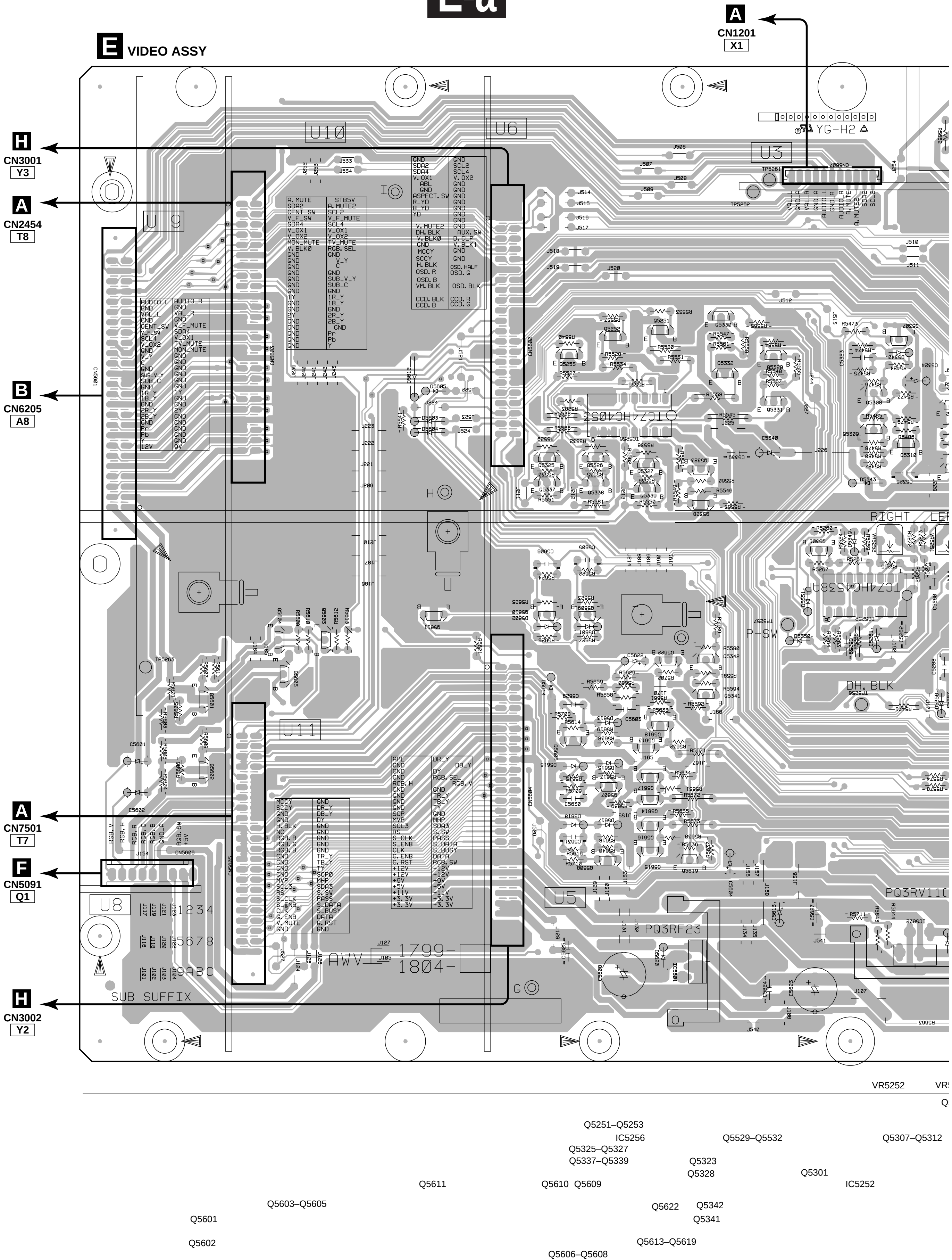

A
B
C
D
T4
P.GND
REM OUT
STB5V
T11
FOR WRITER
P.GND
RESET
PGM_OE
F_SDA
F_SCL
STB5V
VPP
F_BUSY
C7065
T10
P.GND
STB5V
D_RST
D_BUSY
D_INT
D_SDA
D_SCL
T3
T6
LED ON/OFF
KEY
STB5V
P.GND
12V
DPO
DTV LED
TMR LED
T9
T5
TV-2L
TV-2R
TV GND
TV-2V
TV GND
TV-1L
TV-1R
TV GND
TV-1V
TV GND
MODE SELECT1
TV GND
+5V
+5V

SIDE B


T7
44
22
44 GND GND 22
G.RST V.MUTE
DATA G.ENB
S_BUSY CLK
S_DATA S_ENB
PASS S_CLK
S.SW RS
SDA3 SCL3
MHP MVP
SCP0 GND
TY GND
TB_Y GND
TR_Y GND
GND RGB.B
GND RGB.G
GND RGB.R
GND NC
GND H.BLK
DY GND
DB_Y GND
DR_Y SCCY
23 GND MCCY 1
23
1
50
25
50 Y GND 25
Pb GND
Pr GND
GND GND
2B_Y GND
2R_Y 2Y
GND GND
1B_Y GND
1R_Y 1Y
GND GND
SUB_C GND
SUB_V_Y GND
GND GND
C GND
V_Y GND
GND GND
RGB.SEL V.BLK0
TV_MUTE MON_MUTE
V_O/X2 V_O/X2
V_O/X1 V_O/X1
SCL4 SDA4
V_F_MUTE V_F_SW
SCL2 CENT_SW
A.MUTE2 SDA2
26 STB5V A.MUTE 1
26
1
T8

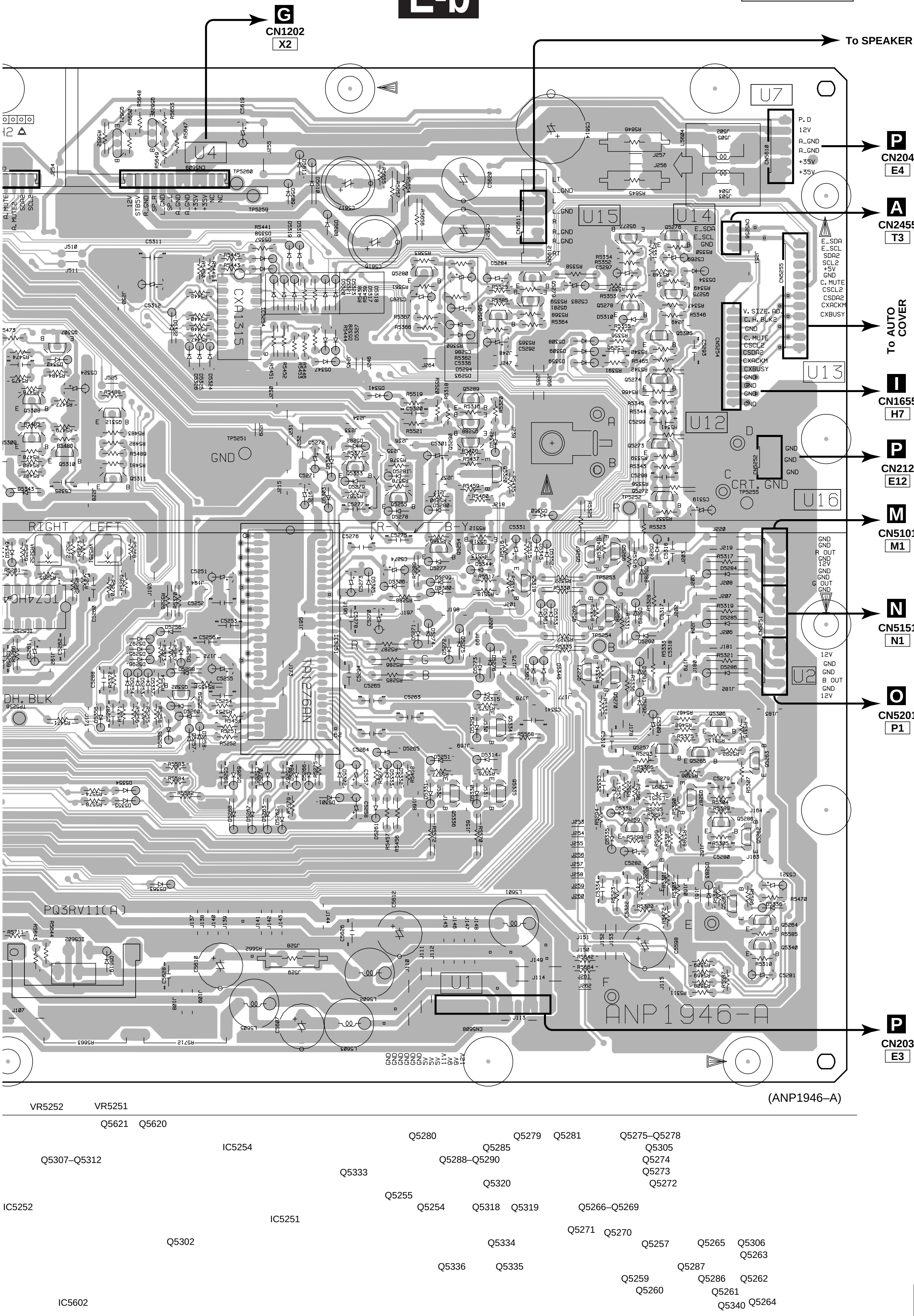
4.3 VIDEO ASSY

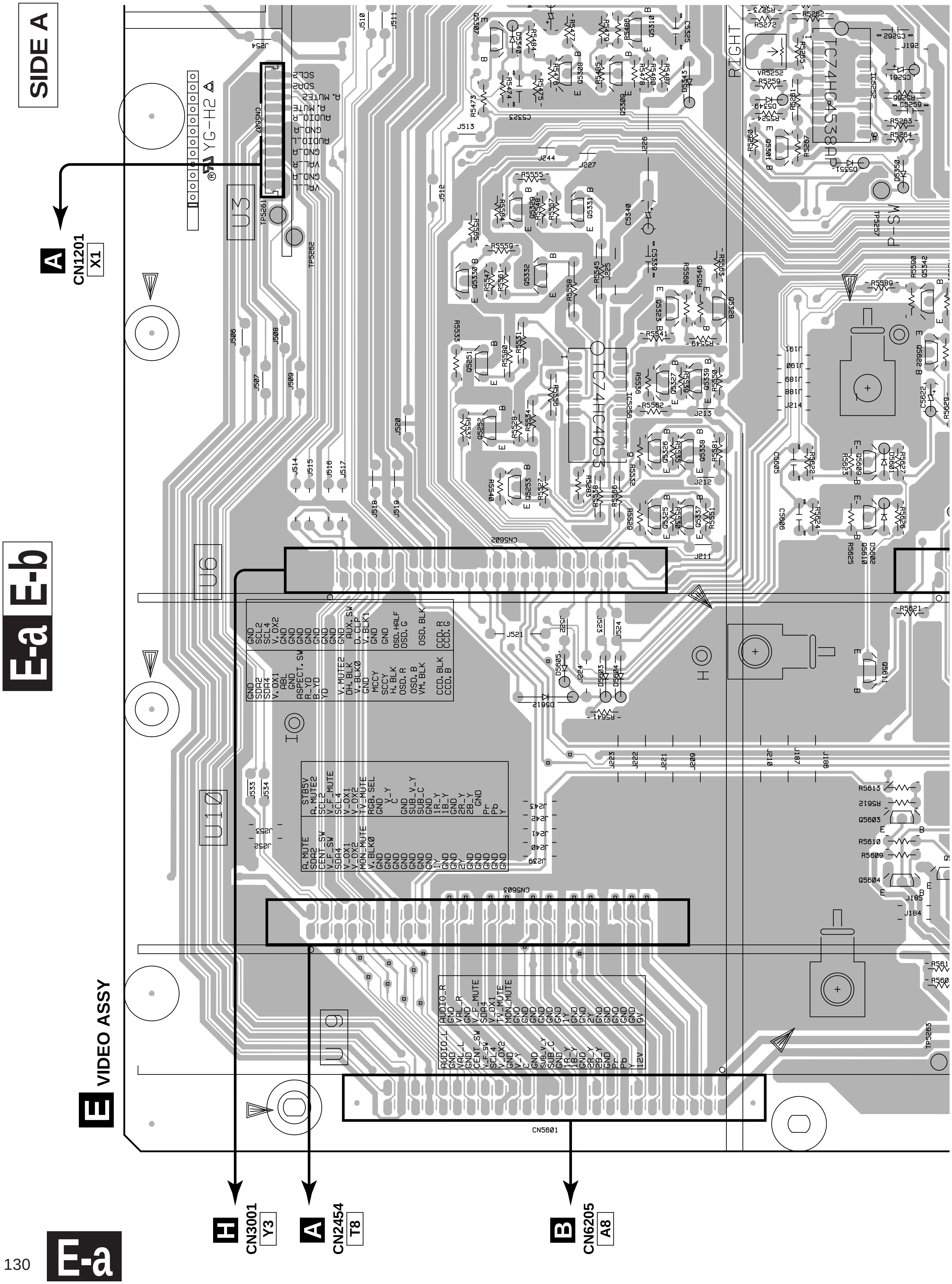
E-a

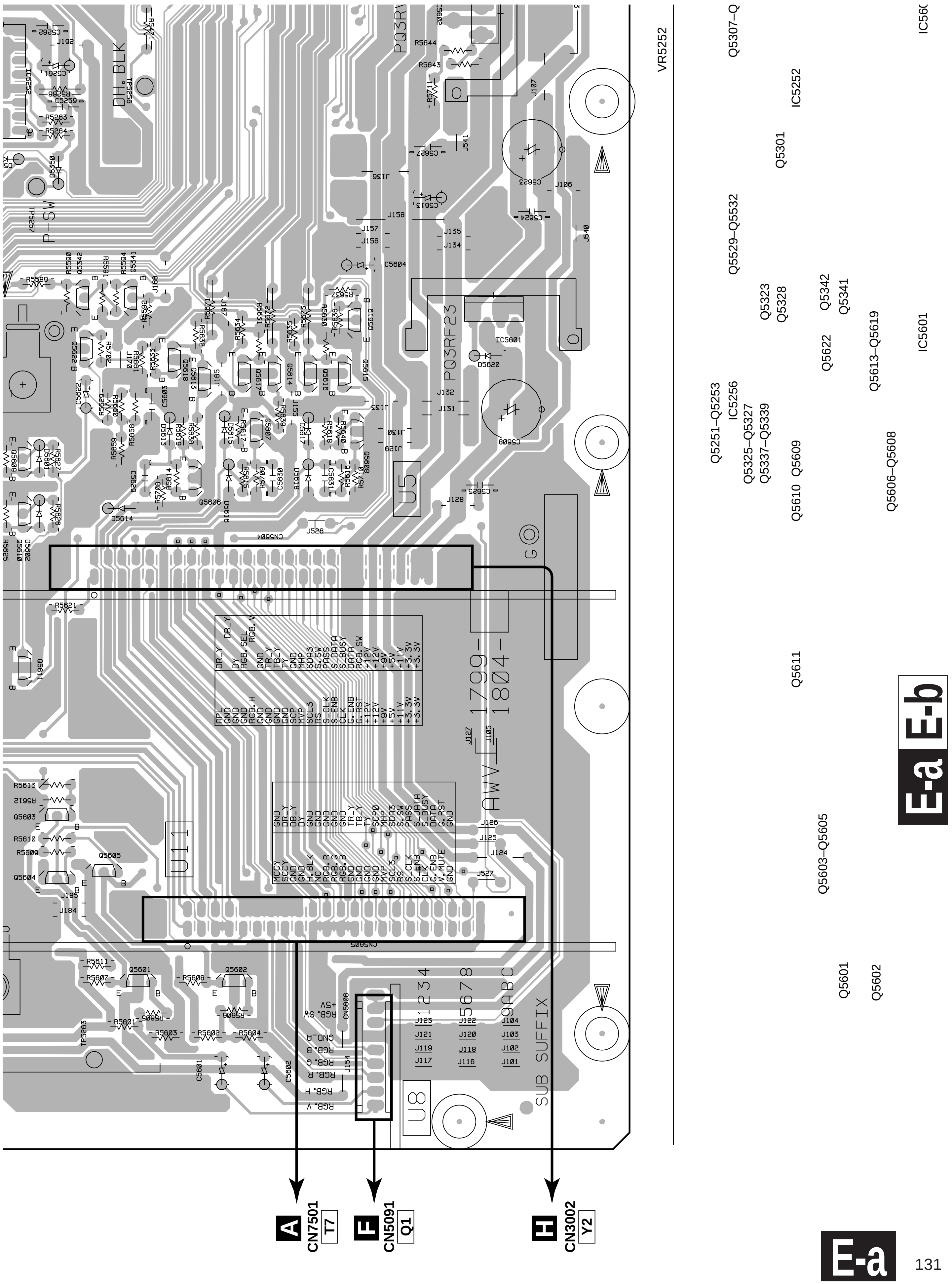

E VIDEO ASSY
A CN1201 X1
H CN3001 Y3
A CN2454 T8
B CN6205 A8
A CN7501 T7
F CN5091 Q1
H CN3002 Y2
U10
U6
U3
U9
U11
U8
U5
YG-H2
TC74HC4053
TC74HC4538AP
PQ3RF23
PQ3RV11
RIGHT
P-SW
DH.BLK
AWV 1799-1804-
SUB SUFFIX
VR5252
Q5251–Q5253
IC5256
Q5529–Q5532
Q5307–Q5312
Q5325–Q5327
Q5337–Q5339
Q5323
Q5328
Q5301
Q5611
Q5610 Q5609
IC5252
Q5603–Q5605
Q5622
Q5342
Q5601
Q5341
Q5602
Q5613–Q5619
Q5606–Q5608
IC5601
IC5602

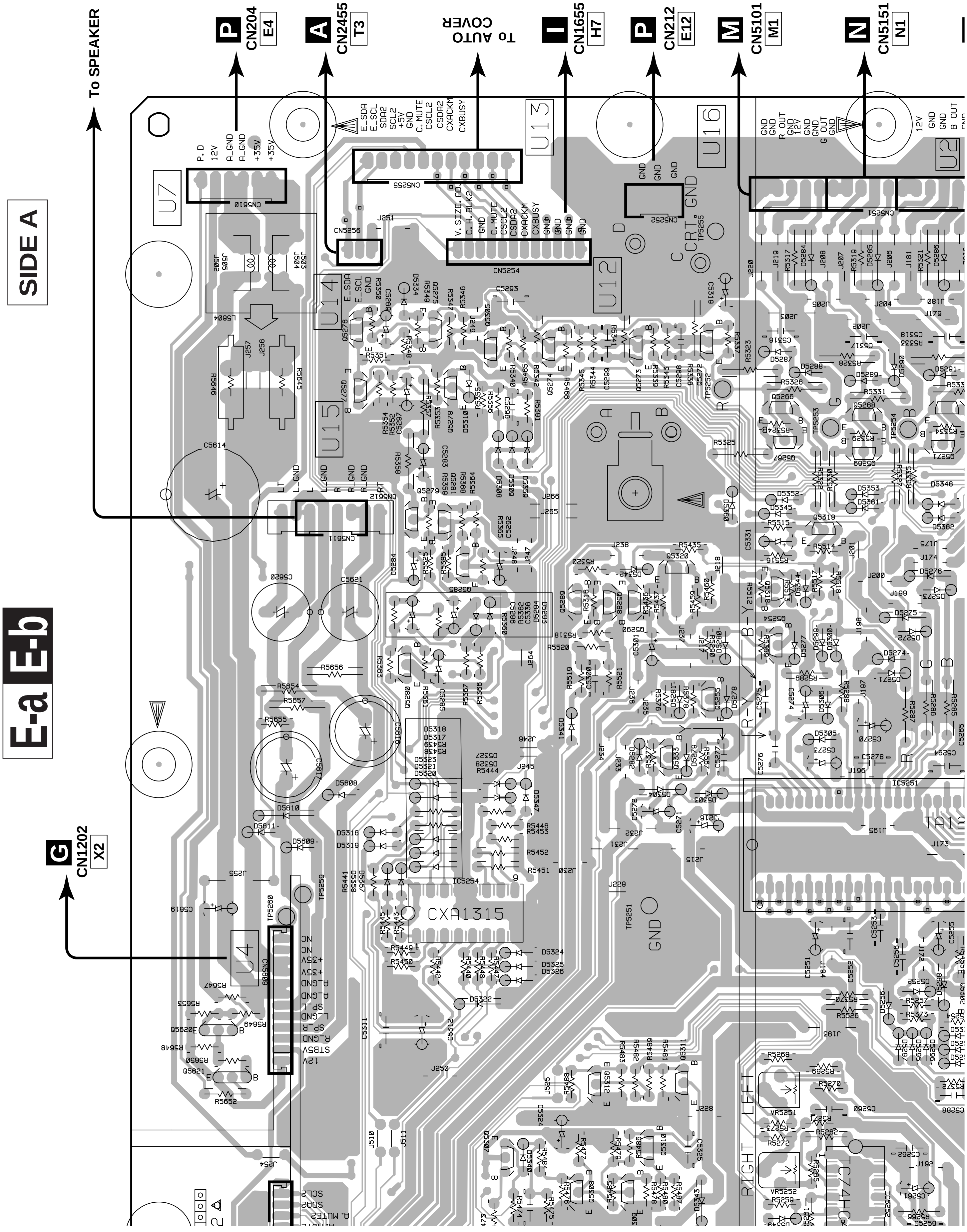
E-b

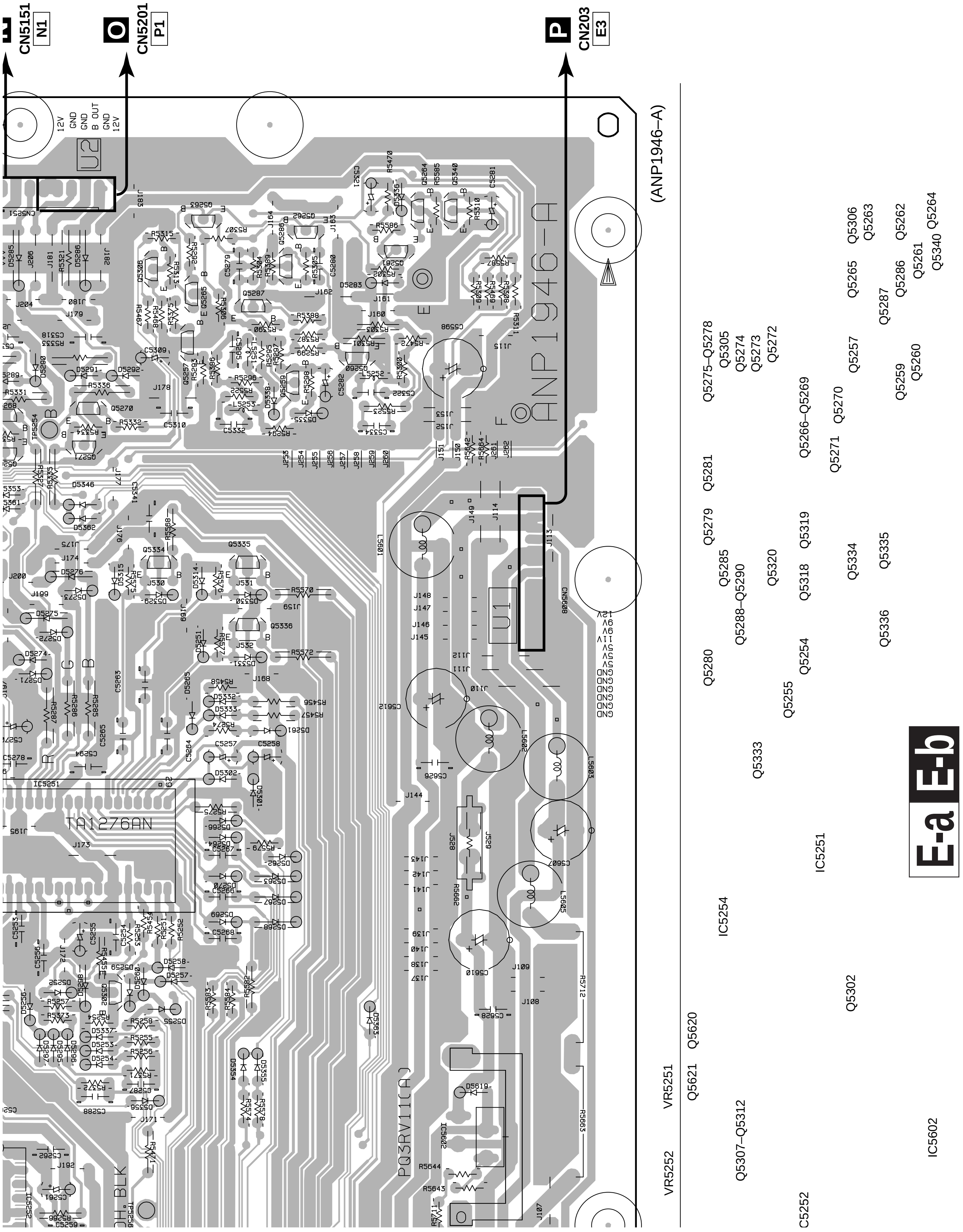
SIDE A


G
CN1202
X2
To SPEAKER
P
CN204
E4
A
CN2455
T3
To AUTO COVER
I
CN1655
H7
P
CN212
E12
M
CN5101
M1
N
CN5151
N1
O
CN5201
P1
P
CN203
E3
U1
U2
U4
U7
U12
U13
U14
U15
U16
CXA1315
TA1276AN
ANP1946-A
PQ3RV11(A)
RIGHT
LEFT
GND
CRT. GND
DH. BLK
P. D
12V
A_GND
A_GND
+35V
+35V
E_SDA
E_SCL
SDA2
SCL2
+5V
GND
C. MUTE
CSCL2
CSDA2
CXACKM
CXBUSY
V. SIZE. ADJ
C. H. BLK2
GND
C. MUTE
CSCL2
CSDA2
CXACKM
CXBUSY
GND
GND
GND
GND
GND
GND
GND
GND
R OUT
GND
12V
GND
G OUT
GND
12V
GND
GND
B OUT
GND
12V
(ANP1946–A)
VR5252
VR5251
Q5621
Q5620
Q5307–Q5312
IC5254
Q5280
Q5279
Q5281
Q5275–Q5278
Q5285
Q5305
Q5288–Q5290
Q5274
Q5333
Q5273
Q5320
Q5272
Q5255
IC5252
Q5254
Q5318
Q5319
Q5266–Q5269
IC5251
Q5271
Q5270
Q5302
Q5334
Q5257
Q5265
Q5306
Q5263
Q5336
Q5335
Q5287
Q5259
Q5286
Q5262
Q5260
Q5261
IC5602
Q5340
Q5264

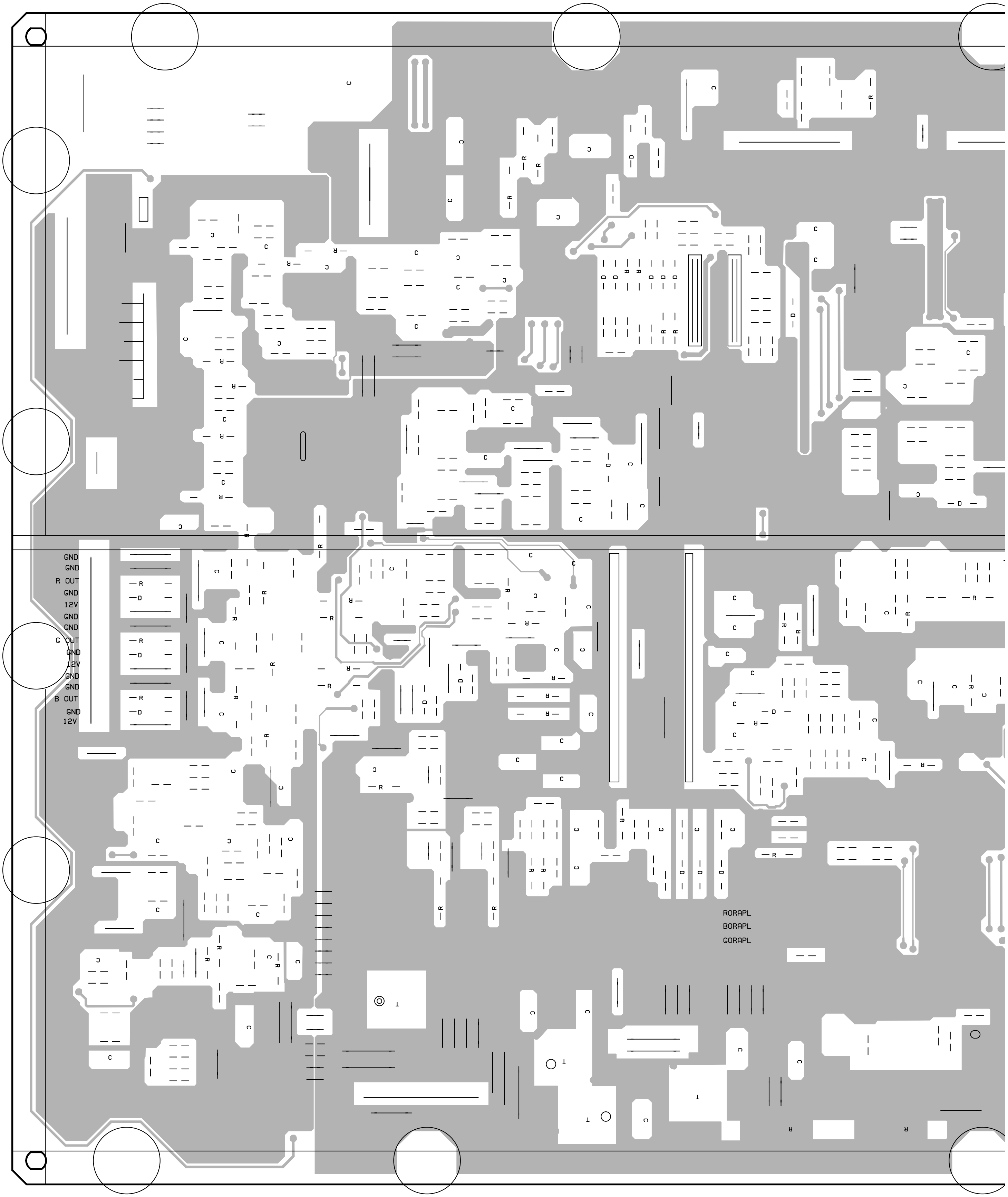

SIDE A
A
CN1201
X1
E-a E-b
E VIDEO ASSY
H
CN3001
Y3
A
CN2454
T8
B
CN6205
A8
CN5601
CN5602
CN5603
CN5604
U3
U6
U10
U9
YG-H2
TC74HC4053
TC74HC4538AP
RIGHT
P-SW
SCL2
SDA2
A.MUTE2
A.MUTE
AUDIO_R
GND_A
AUDIO_L
GND_A
VAL_R
GND_A
VAL_L
STB5V
A.MUTE2
SCL2
V_F_MUTE
SCL4
V.OX1
V.OX2
TV_MUTE
RGB.SEL
GND
V_Y
C
GND
SUB_V_Y
SUB_C
GND
1R_Y
1B_Y
2R_Y
2B_Y
GND
Pr
Pb
Y
AUDIO_L
AUDIO_R
GND
VAL_L
VAL_R
CENT_SW
V_F_SW
V_F_MUTE
SCL4
SDA4
V_OX2
V_OX1
TV_MUTE
MON_MUTE
12V
9V
CCD.BLK
CCD.B
CCD.R
CCD.G
OSD.BLK
OSD.HALF
OSD.G
OSD.R
OSD.B
VM.BLK
AUX.SW
D.CLP
V.BLK1
V.BLK0
V.MUTE2
DH.BLK
MCCY
SCCY
H.BLK
ASPECT.SW
R.YD
B.YD
YD
TP5261
TP5262
TP5257
TP5263
VR5252


VR5252
Q5307–Q
IC560
IC5252
Q5301
Q5529–Q5532
Q5323
Q5328
Q5342
Q5341
Q5622
Q5613–Q5619
IC5601
Q5251–Q5253
IC5256
Q5325–Q5327
Q5337–Q5339
Q5609
Q5610
Q5606–Q5608
Q5611
Q5603–Q5605
Q5601
Q5602
A
B
C
D
E-a E-b
PQ3RF23
U5
U11
U8
AWV 1799-
1804-
SUB SUFFIX
CN5604
CN5605
CN5606
A
CN7501
T7
F
CN5091
Q1
H
CN3002
Y2

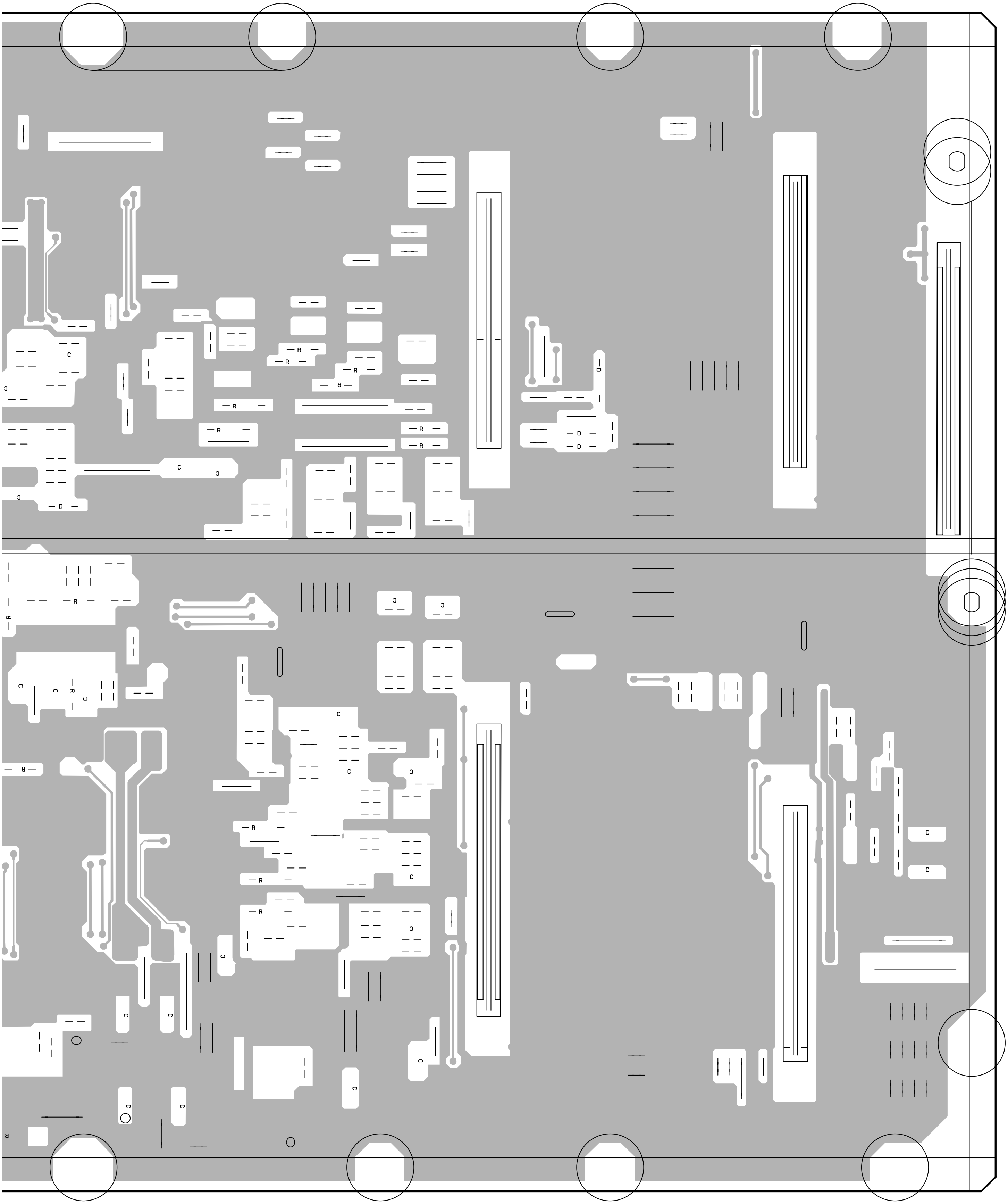

To SPEAKER
P CN204 E4
A CN2455 T3
To AUTO COVER
I CN1655 H7
P CN212 E12
M CN5101 M1
N CN5151 N1
G CN1202 X2
SIDE A
E-a E-b
U7
U13
U16
U2
U12
U14
U15
U4
CN5610
CN5255
CN5256
CN5254
CN5252
CN5251
CN5612
CN5611
CN5609
IC5254
CXA1315
IC5251
VR5251
VR5252
C5614
C5620
C5621
C5617
C5618
CRT. GND
GND
RIGHT
LEFT
R-Y
B-Y
P.D
12V
A_GND
+35V
E.SDA
E.SCL
SDA2
SCL2
+5V
C.MUTE
CSCL2
CSDA2
CXACKM
CXBUSY
V.SIZE.ADJ
C.H.BLK2
R OUT
G OUT
B OUT
L_GND
R_GND
NC
SP_L
SP_R
STB5V
A.MUTE2


CN5151
N1
O
CN5201
P1
P
CN203
E3
A
B
C
D
(ANP1946–A)
ANP1946-A
U2
U1
12V
GND
GND
B OUT
GND
12V
CN5608
12V
9V
9V
11V
5V
5V
GND
GND
GND
GND
GND
IC5251
TA1276AN
IC5602
PQ3RV11(A)
CN5251
Q5306
Q5263
Q5262
Q5264
Q5265
Q5286
Q5261
Q5340
Q5287
Q5257
Q5259
Q5260
Q5275–Q5278
Q5305
Q5274
Q5273
Q5272
Q5266–Q5269
Q5270
Q5271
Q5281
Q5279
Q5285
Q5288–Q5290
Q5320
Q5319
Q5318
Q5334
Q5335
Q5336
Q5280
Q5254
Q5255
Q5333
IC5251
IC5254
Q5302
Q5620
Q5621
VR5251
VR5252
Q5307–Q5312
IC5602
C5252
E-a
E-b

E VIDEO ASSY


A
B
C
D
GND
GND
R OUT
GND
12V
GND
GND
G OUT
GND
12V
GND
GND
B OUT
GND
12V
RORAPL
BORAPL
GORAPL

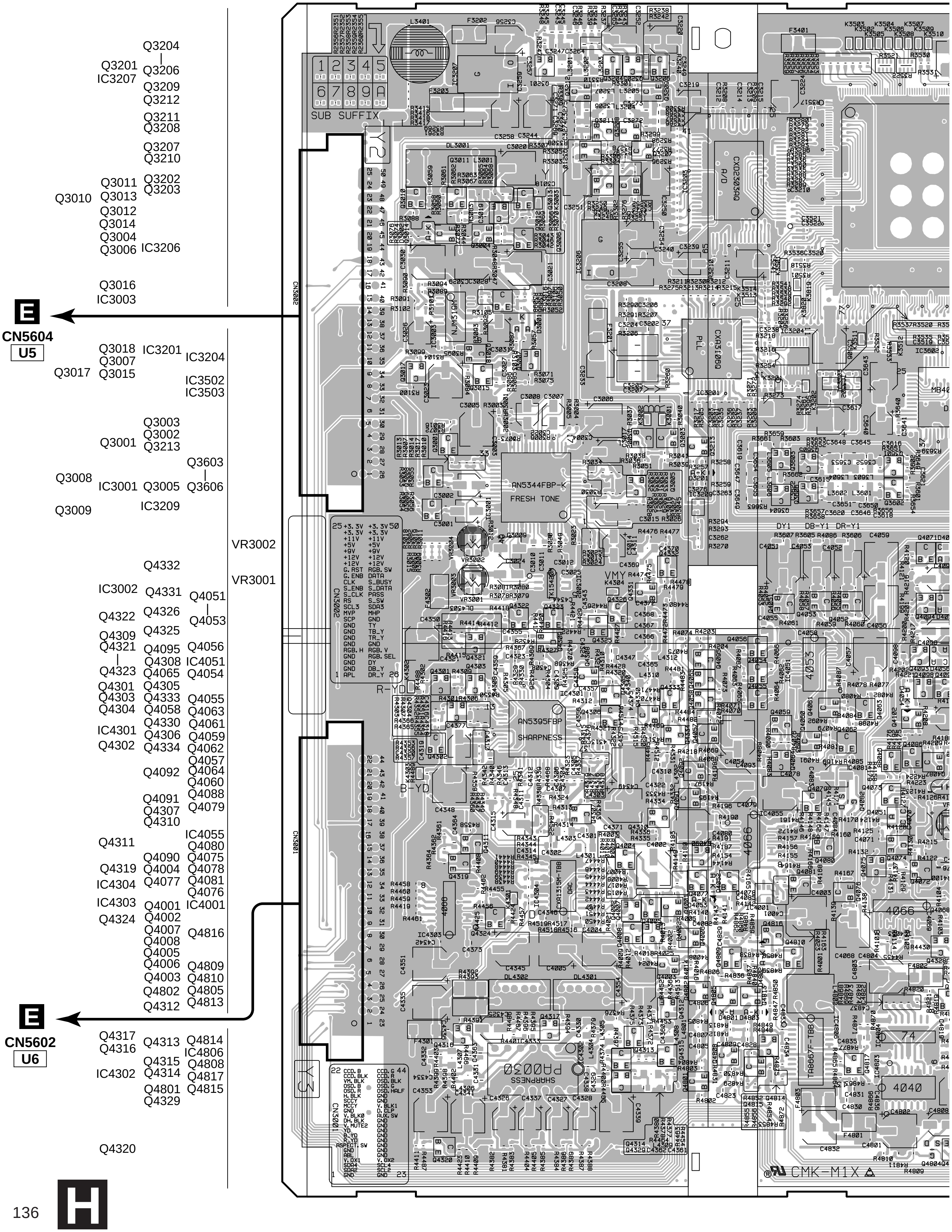
SIDE B



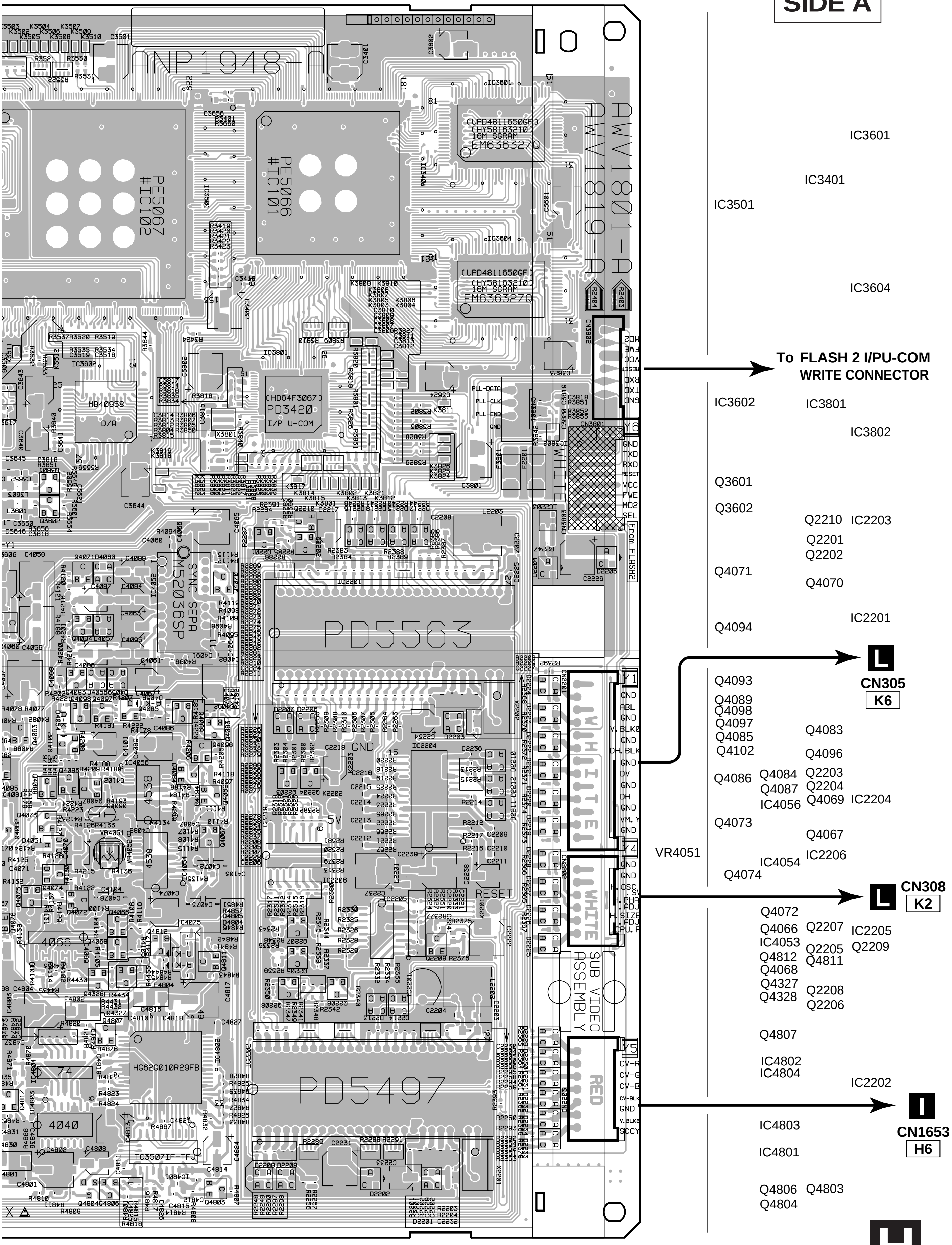
(ANP1946–A)

4.4 SUB VIDEO SERVICE ASSY (For PRO-610HD, PRO-510HD)

H SUB VIDEO SERVICE ASSY

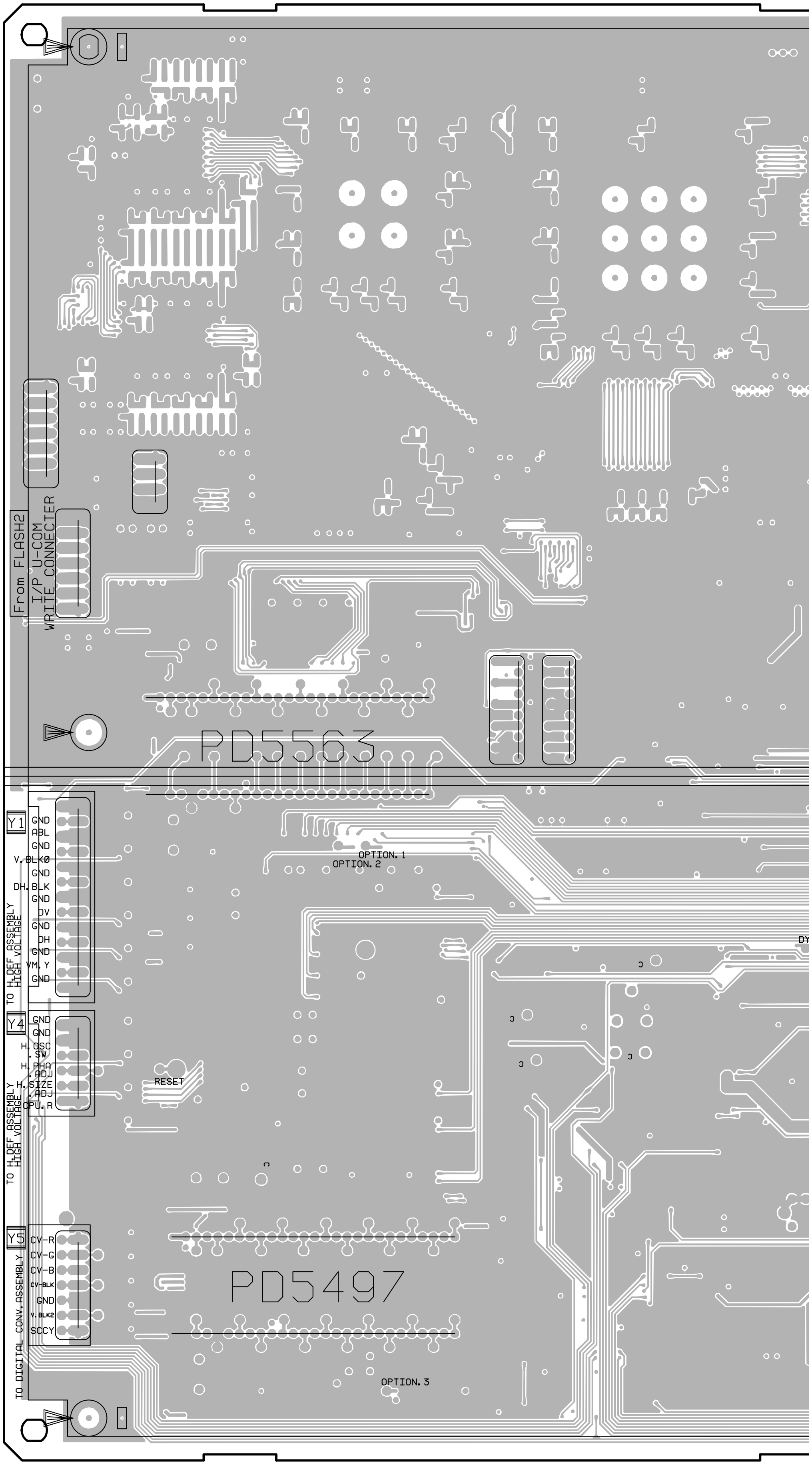

Q3204
Q3206
Q3201
IC3207
Q3209
Q3212
Q3211
Q3208
Q3207
Q3210
Q3011
Q3202
Q3203
Q3010
Q3013
Q3012
Q3014
Q3004
Q3006
IC3206
Q3016
IC3003
E
CN5604
U5
Q3018
IC3201
Q3007
IC3204
Q3017
Q3015
IC3502
IC3503
Q3003
Q3002
Q3001
Q3213
Q3603
Q3606
Q3008
IC3001
Q3005
IC3209
Q3009
VR3002
VR3001
Q4332
IC3002
Q4331
Q4051
Q4053
Q4322
Q4326
Q4325
Q4309
Q4321
Q4095
Q4056
Q4308
IC4051
Q4323
Q4065
Q4054
Q4301
Q4305
Q4303
Q4333
Q4055
Q4304
Q4058
Q4063
Q4330
Q4061
IC4301
Q4306
Q4059
Q4302
Q4334
Q4062
Q4057
Q4092
Q4064
Q4060
Q4088
Q4091
Q4079
Q4307
Q4310
IC4055
Q4311
Q4080
Q4090
Q4075
Q4319
Q4004
Q4078
IC4304
Q4077
Q4081
Q4076
IC4303
Q4001
IC4001
Q4324
Q4002
Q4007
Q4816
Q4008
Q4005
Q4006
Q4809
Q4003
Q4810
Q4802
Q4805
Q4312
Q4813
E
CN5602
U6
Q4317
Q4313
Q4814
Q4316
IC4806
Q4315
Q4808
IC4302
Q4314
Q4817
Q4801
Q4815
Q4329
Q4320
SUB SUFFIX
CN3002
CN3001
AN5344FBP-K
FRESH TONE
AN5395FBP
SHARPNESS
CXD2303AQ
A/D
CXA1906Q
PLL
NJM3190M
TA8667F-TBB
CXA2131SM-TBB
DAC
CMK-M1X

SIDE A

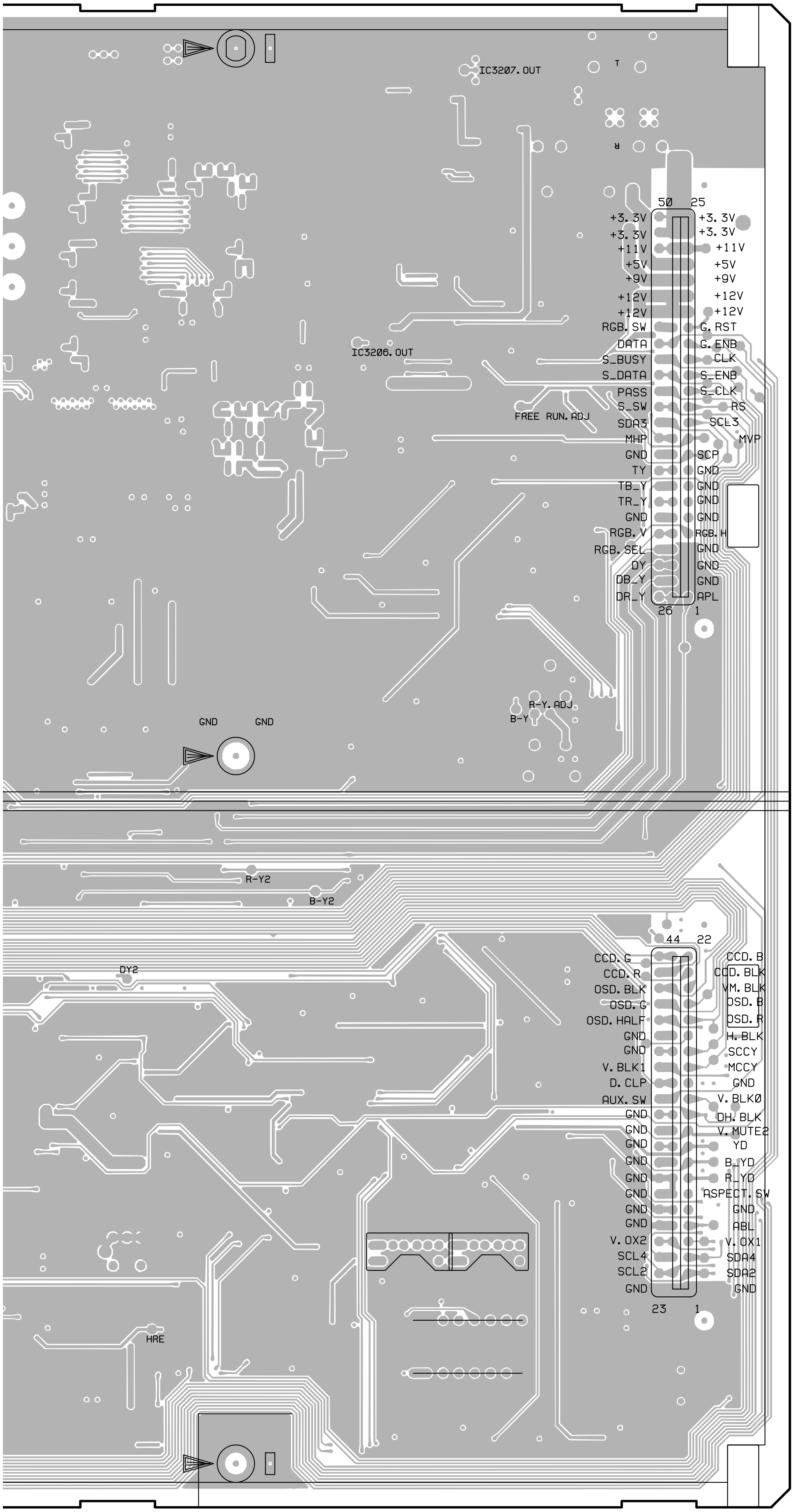

ANP1948-A
AWV1801-A
AWV1819-A
PE5067 #IC102
PE5066 #IC101
UPD4811650GF
HY5816321Q
16M SGRAM
EM636327Q
HD64F3067
PD3420
I/P U-COM
MB40958
D/A
SYNC SEPA
M52036SP
PD5563
PD5497
HG62G010R29FB
IC3507IF-TF
4538
4066
4040
74
WHITE
RED
SUB VIDEO ASSEMBLY
From FLASH2
RESET
GND
5V
MD2
FWE
VCC
RESET
RXD
TXD
GND
SEL
ABL
V. BLK0
DH. BLK
DV
DH
VM. Y
H. OSC
H. PHA
H. ADJ
H. SIZE
PU. R
CV-R
CV-G
CV-B
CV-BLK
V. BLK
SCCY
IC3601
IC3401
IC3501
IC3604
To FLASH 2 I/PU-COM
WRITE CONNECTOR
IC3602
IC3801
IC3802
Q3601
Q3602
Q2210
IC2203
Q2201
Q2202
Q4071
Q4070
Q4094
IC2201
Q4093
Q4089
Q4098
Q4097
Q4085
Q4102
Q4083
Q4096
Q4086
Q4084
Q4087
IC4056
Q2203
Q2204
Q4069
IC2204
Q4073
Q4067
VR4051
IC4054
Q4074
IC2206
Q4072
Q4066
IC4053
Q4812
Q4068
Q4327
Q4328
Q2207
Q2205
Q4811
Q2208
Q2206
IC2205
Q2209
Q4807
IC4802
IC4804
IC2202
IC4803
IC4801
Q4806
Q4804
Q4803
L
CN305
K6
L
CN308
K2
I
CN1653
H6

(ANP1948–A)

H SUB VIDEO SERVICE ASSY

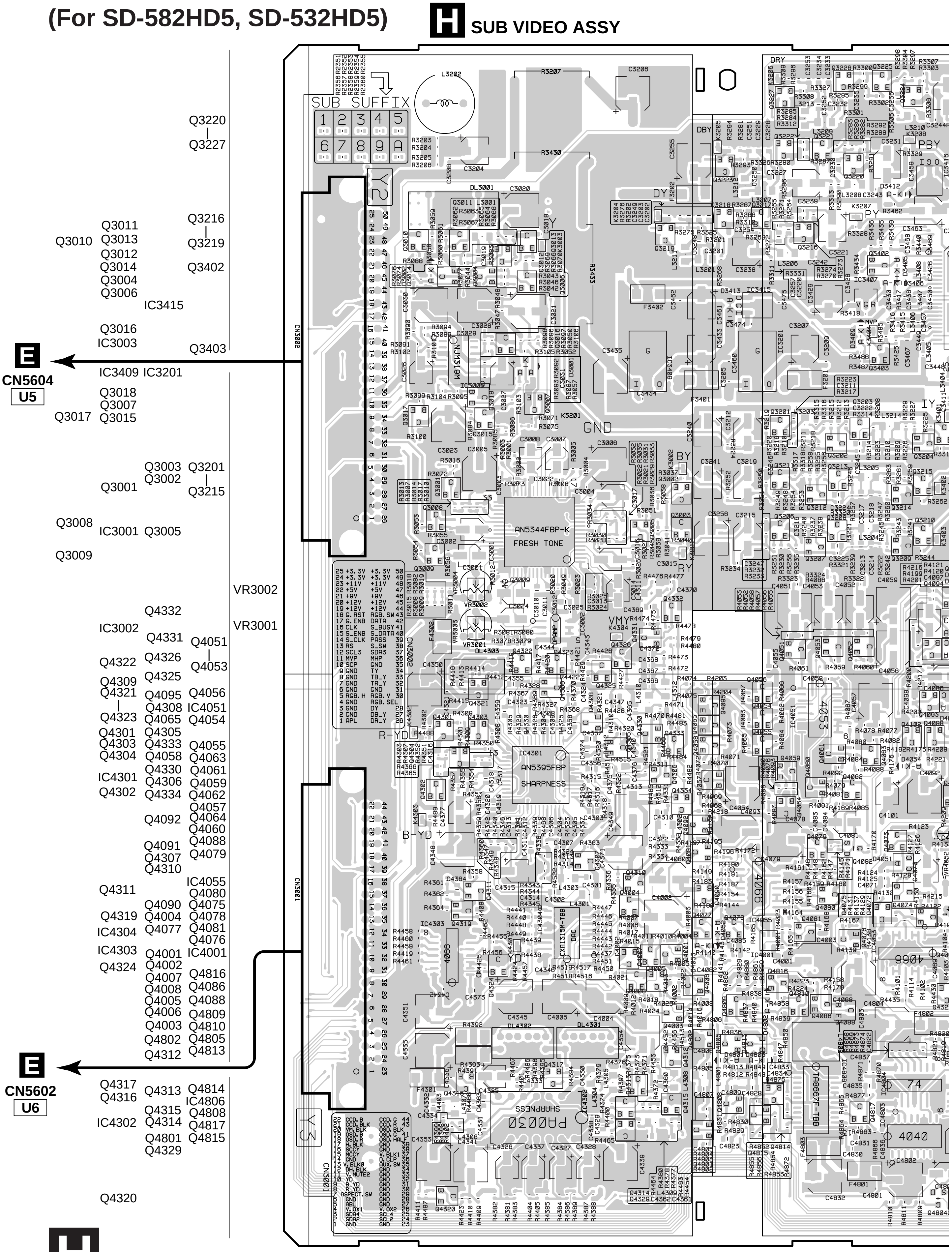

From FLASH2
I/P U-COM
WRITE CONNECTER
PD5563
Y1
GND
ABL
GND
V.BLKØ
GND
DH.BLK
GND
DV
GND
DH
GND
VM.Y
GND
TO H.DEF ASSEMBLY
HIGH VOLTAGE
OPTION.1
OPTION.2
DY
Y4
GND
GND
H.OSC
.SW
H.PHA
.ADJ
H.SIZE
.ADJ
CPU.R
RESET
TO H.DEF ASSEMBLY
HIGH VOLTAGE
Y5
CV-R
CV-G
CV-B
CV-BLK
GND
V.BLK2
SCCY
TO DIGITAL CONV.ASSEMBLY
PD5497
OPTION.3

SIDE B

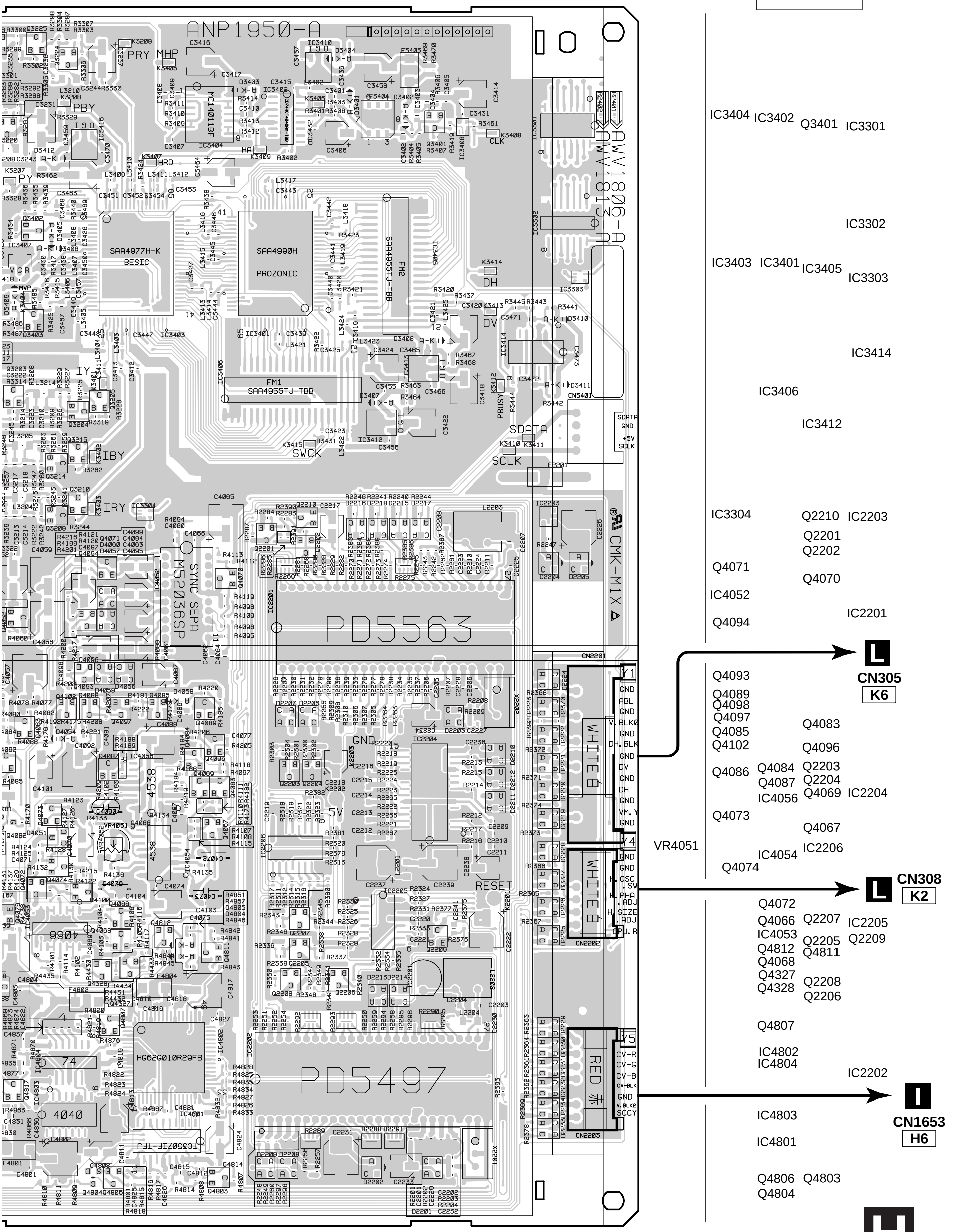

IC3207.OUT
IC3206.OUT
FREE RUN.ADJ
50
25
+3.3V
+3.3V
+11V
+5V
+9V
+12V
+12V
RGB.SW
DATA
S_BUSY
S_DATA
PASS
S_SW
SDA3
MHP
GND
TY
TB_Y
TR_Y
GND
RGB.V
RGB.SEL
DY
DB_Y
DR_Y
26
+3.3V
+3.3V
+11V
+5V
+9V
+12V
+12V
G.RST
G.ENB
CLK
S_ENB
S_CLK
RS
SCL3
MVP
SCP
GND
GND
GND
GND
RGB.H
GND
GND
GND
APL
1
GND
GND
R-Y.ADJ
B-Y
R-Y2
B-Y2
DY2
44
22
CCD.G
CCD.R
OSD.BLK
OSD.G
OSD.HALF
GND
GND
V.BLK1
D.CLP
AUX.SW
GND
GND
GND
GND
GND
GND
GND
GND
V.OX2
SCL4
SCL2
GND
23
CCD.B
CCD.BLK
VM.BLK
OSD.B
OSD.R
H.BLK
SCCY
MCCY
GND
V.BLK0
DH.BLK
V.MUTE2
YD
B_YD
R_YD
ASPECT.SW
GND
ABL
V.OX1
SDA4
SDA2
GND
1
HRE

(ANP1948–A)

4.5 SUB VIDEO ASSY
(For SD-582HD5, SD-532HD5)

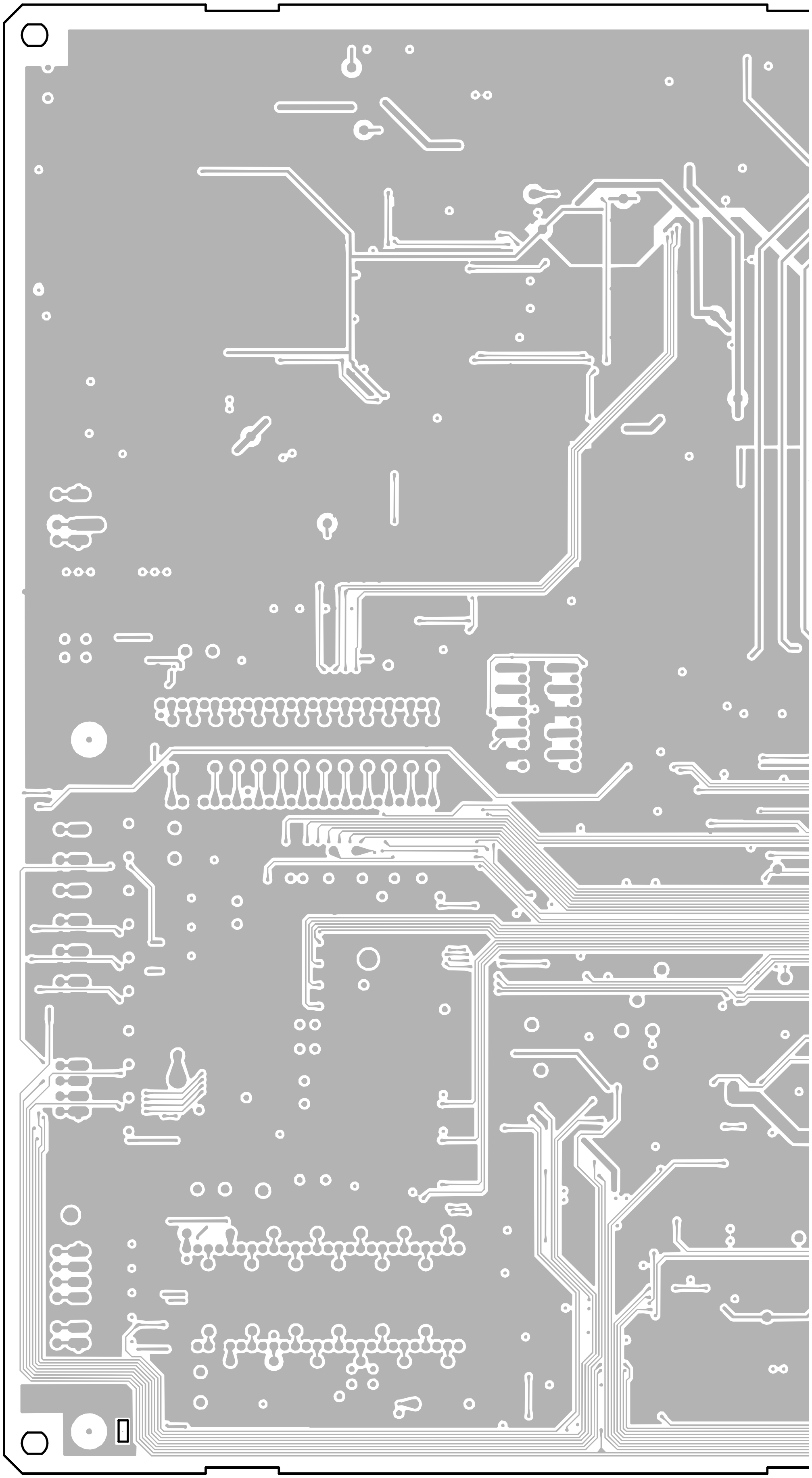

H SUB VIDEO ASSY
Q3220
|
Q3227
Q3011
Q3010
Q3013
Q3012
Q3014
Q3004
Q3006
Q3216
|
Q3219
Q3402
IC3415
Q3016
IC3003
Q3403
E
CN5604
U5
IC3409
IC3201
Q3018
Q3007
Q3017
Q3015
Q3003
Q3002
Q3001
Q3201
|
Q3215
Q3008
IC3001
Q3005
Q3009
VR3002
VR3001
Q4332
IC3002
Q4331
Q4051
|
Q4053
Q4322
Q4326
Q4325
Q4309
Q4321
|
Q4323
Q4095
Q4308
Q4065
Q4305
Q4056
IC4051
Q4054
Q4301
Q4303
Q4304
Q4333
Q4058
Q4055
Q4063
IC4301
Q4302
Q4330
Q4306
Q4334
Q4061
Q4059
Q4062
Q4057
Q4092
Q4064
Q4060
Q4091
Q4307
Q4310
Q4088
Q4079
Q4311
IC4055
Q4080
Q4090
Q4075
Q4319
Q4004
Q4078
IC4304
Q4077
Q4081
Q4076
IC4303
Q4001
IC4001
Q4324
Q4002
Q4007
Q4008
Q4005
Q4006
Q4003
Q4802
Q4312
Q4816
Q4086
Q4088
Q4809
Q4810
Q4805
Q4813
E
CN5602
U6
Q4317
Q4316
Q4313
Q4315
Q4314
Q4801
Q4329
Q4814
IC4806
Q4808
Q4817
Q4815
IC4302
Q4320
SUB SUFFIX
1 2 3 4 5
6 7 8 9 A
L3202
Y2
Y3
CN3002
CN3001
NJM3519M
AN5344FBP-K
FRESH TONE
AN5395FBP
SHARPNESS
PA0030
SHARPNESS
CXD1315M-TBB
DAC
DL3001
DL4301
DL4302
GND
DY
DBY
DRY
PBY
BY
RY
IY
VMY
R-YD
B-YD
4053
4066
4040
4060
TA8687F-TBB
25 +3.3V
24 +3.3V
23 +11V
22 +5V
21 +9V
20 +12V
19 +12V
18 G.RST
17 G.ENB
16 CLK
15 S.ENB
14 S.CLK
13 RS
12 SCL3
11 MVP
10 SCP
9 GND
8 GND
7 GND
6 GND
5 RGB.H
4 GND
3 GND
2 GND
1 APL
+3.3V 50
+3.3V 49
+11V 48
+5V 47
+9V 46
+12V 45
+12V 44
RGB.SW 43
DATA 42
S.BUSY 41
S.DATA 40
PASS 39
S.SW 38
SDA3 37
MHP 36
GND 35
TY 34
TB_Y 33
TR_Y 32
GND 31
RGB.V 30
RGB.SEL 29
DY 28
DB_Y 27
DR_Y 26
1
2
3
4
A
B
C
D

SIDE A

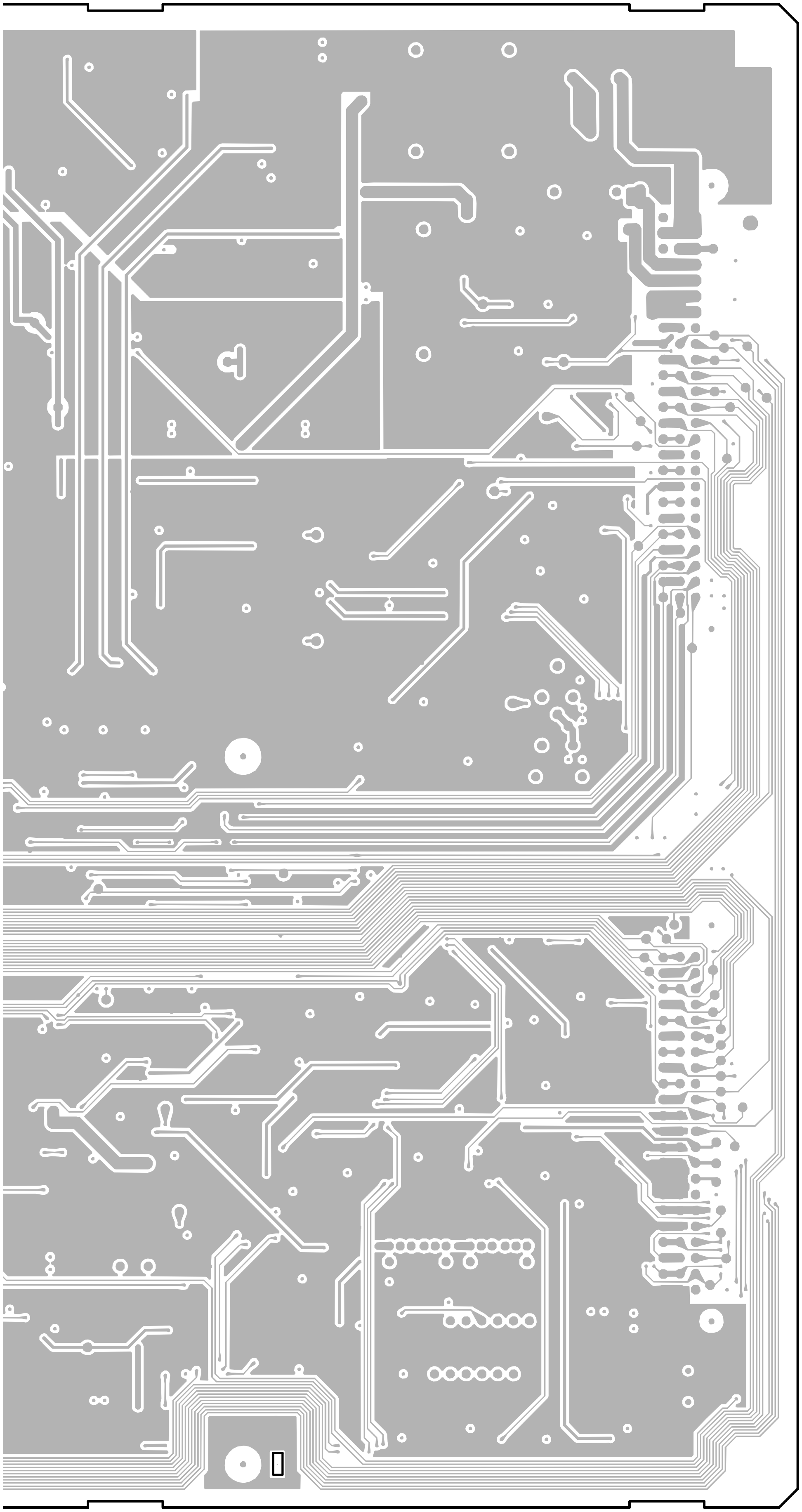

ANP1950-A
PD5563
PD5497
SAA4977H-K BESIC
SAA4990H PROZONIC
SAA4955TJ-TBB
M52036SP SYNC SEPA
HG62G010R29FB
IC3404
IC3402
Q3401
IC3301
IC3302
IC3403
IC3401
IC3405
IC3303
IC3414
IC3406
IC3412
IC3304
Q2210
IC2203
Q2201
Q2202
Q4071
Q4070
IC4052
IC2201
Q4094
Q4093
Q4089
Q4098
Q4097
Q4083
Q4085
Q4102
Q4096
Q4086
Q4084
Q2203
Q4087
Q2204
IC4056
Q4069
IC2204
Q4073
Q4067
VR4051
IC4054
IC2206
Q4074
Q4072
Q4066
Q2207
IC2205
IC4053
Q2205
Q2209
Q4812
Q4811
Q4068
Q4327
Q2208
Q4328
Q2206
Q4807
IC4802
IC4804
IC2202
IC4803
IC4801
Q4806
Q4803
Q4804
L
CN305
K6
L
CN308
K2
I
CN1653
H6
A
B
C
D

(ANP1950–A)

H SUB VIDEO ASSY



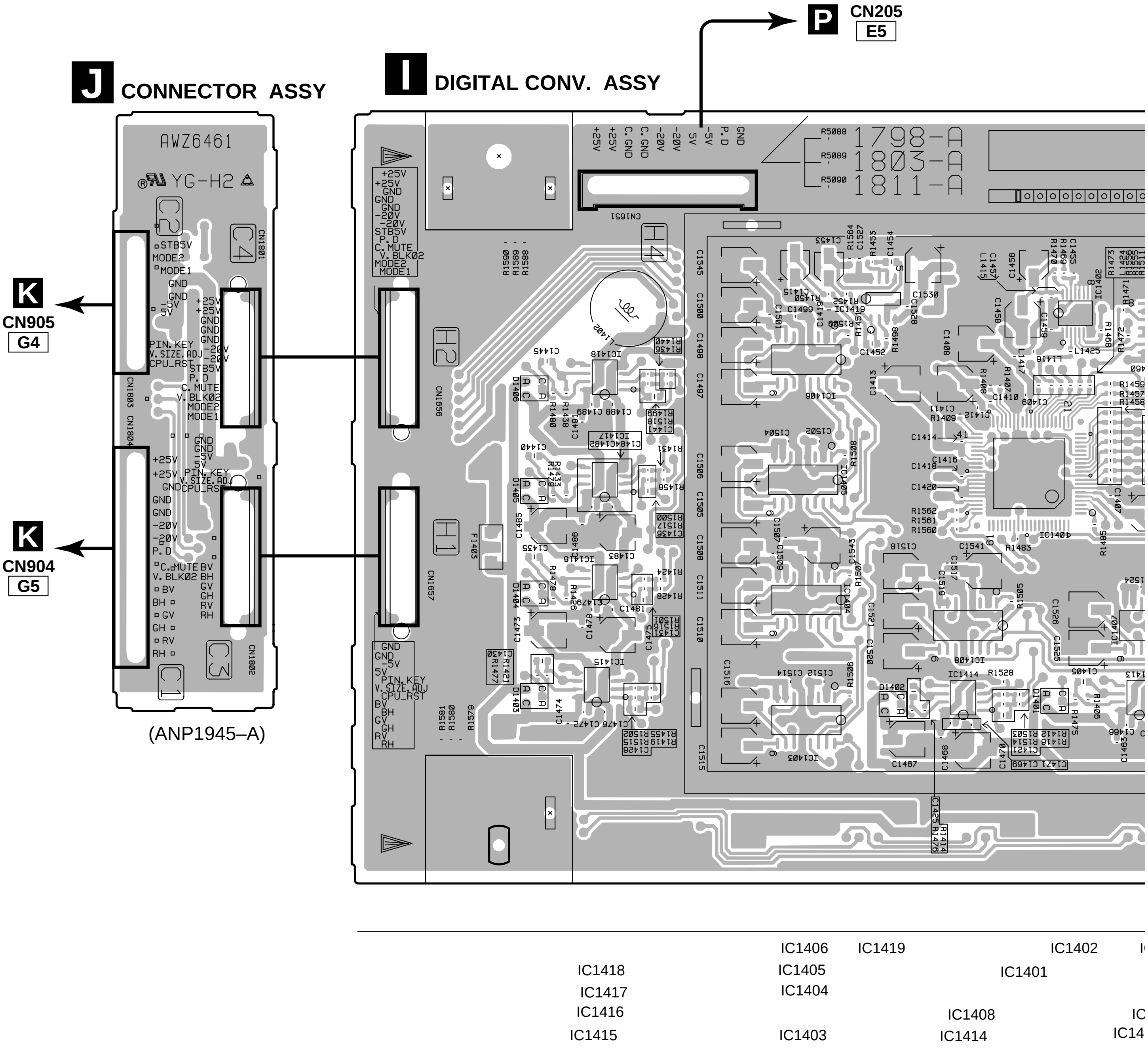
SIDE B



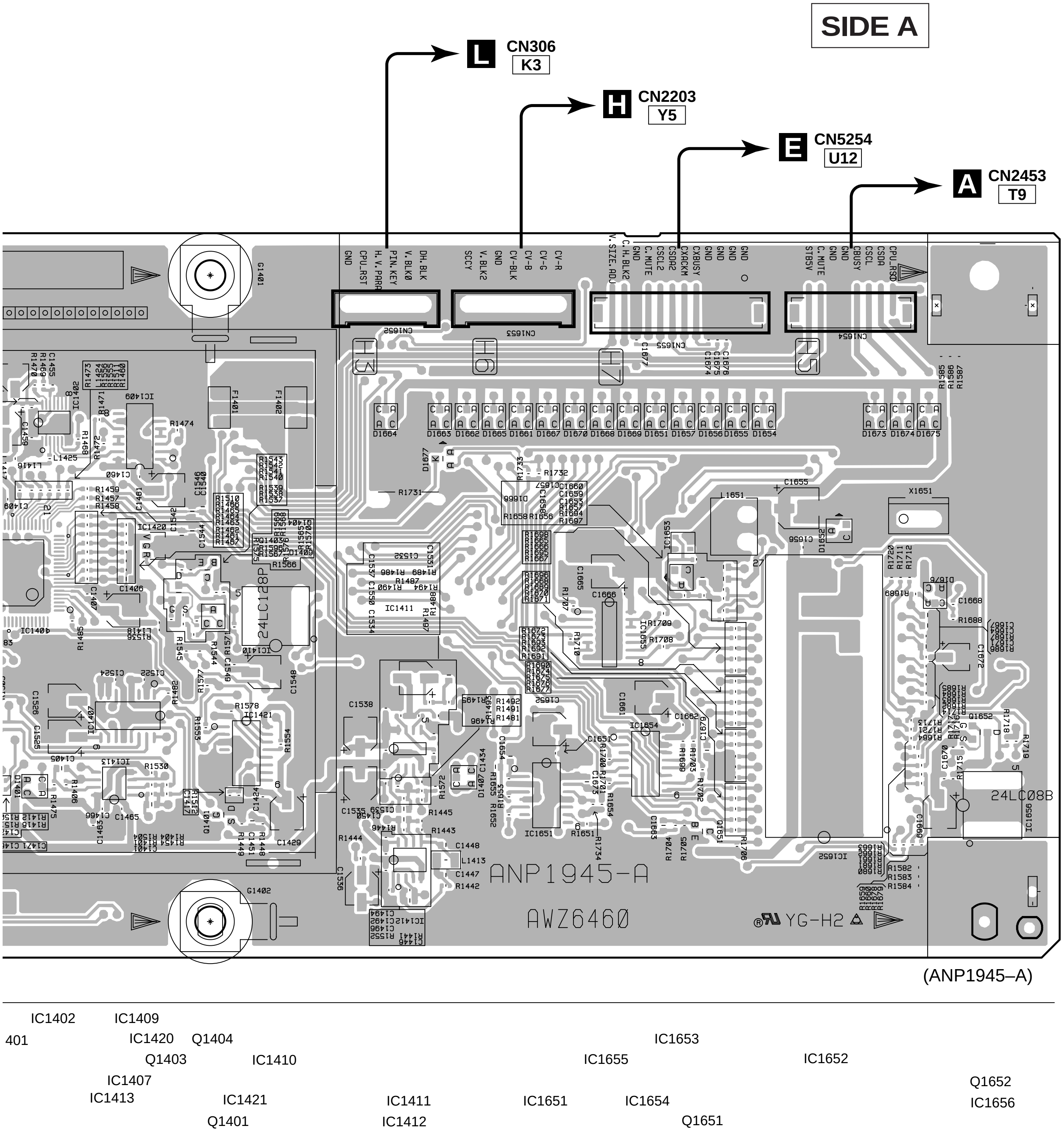
(ANP1950–A)

4.6 DIGITAL CONV. ASSY and CONNECTOR ASSY

SIDE A

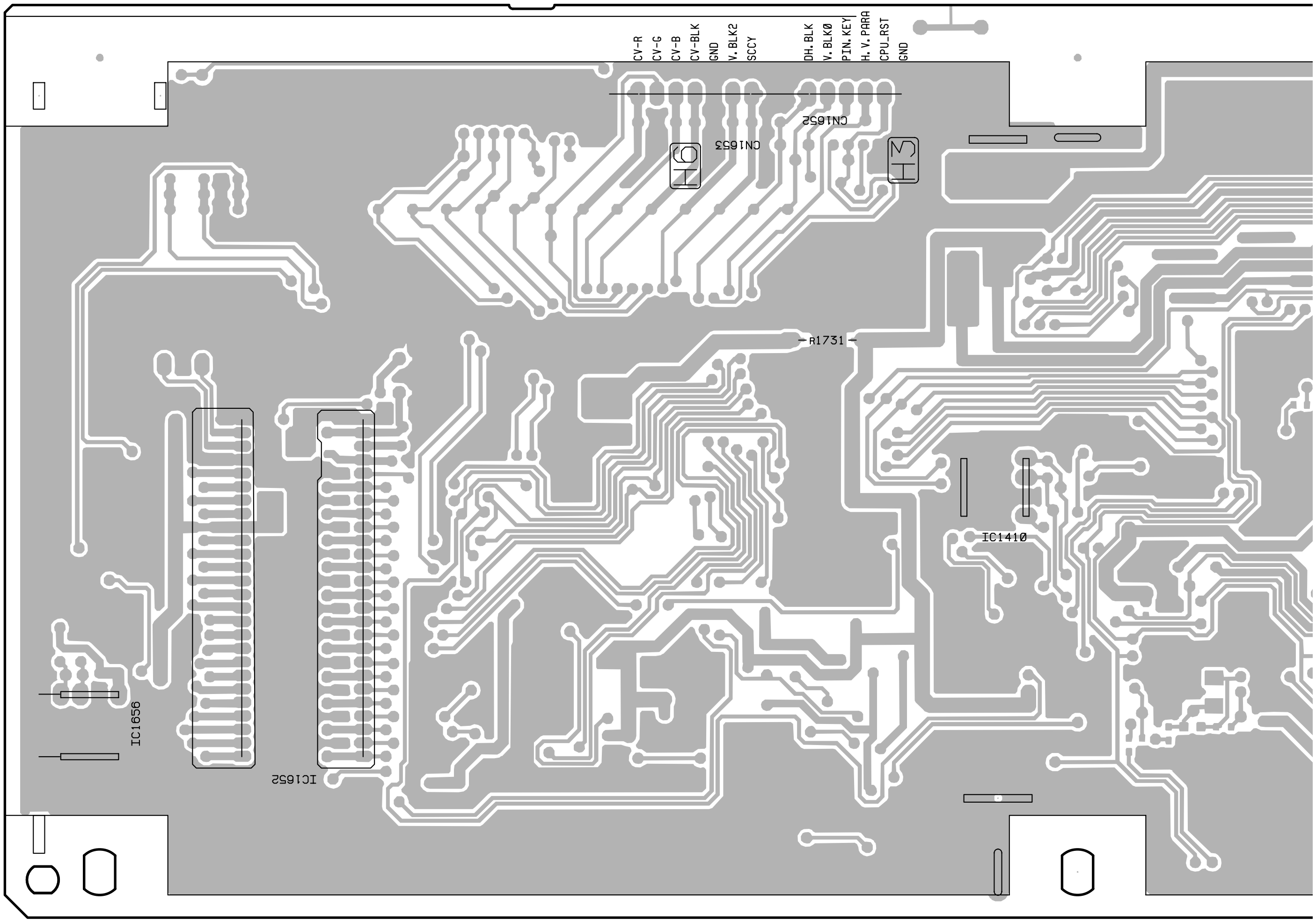

P
CN205
E5
J CONNECTOR ASSY
I DIGITAL CONV. ASSY
K
CN905
G4
K
CN904
G5
AWZ6461
YG-H2
CN1801
CN1802
CN1803
CN1804
CN1651
CN1656
CN1657
1798-A
1803-A
1811-A
+25V
+25V
C.GND
C.GND
-20V
-20V
5V
-5V
P.D
GND
STB5V
MODE2
MODE1
PIN.KEY
V.SIZE.ADJ
CPU_RST
C.MUTE
V.BLK02
BV
BH
GV
GH
RV
RH
IC1406
IC1419
IC1402
IC1418
IC1405
IC1401
IC1417
IC1404
IC1416
IC1408
IC1415
IC1403
IC1414

(ANP1945–A)


SIDE A
L CN306 K3
H CN2203 Y5
E CN5254 U12
A CN2453 T9
GND
CPU.RST
H.V.PARA
PIN.KEY
V.BLK0
DH.BLK
SCCY
V.BLK2
GND
CV-BLK
CV-B
CV-G
CV-R
V.SIZE.ADJ
C.H.BLK2
GND
C.MUTE
CSCL2
CSDA2
CXACKM
CXBUSY
GND
GND
GND
GND
STBSV
C.MUTE
GND
GND
CBUSY
CSCL
CSDA
CPU.RST
CN1652
CN1653
CN1655
CN1654
H3
H6
H7
H5
G1401
G1402
IC1402
IC1409
IC1420
IC1410
IC1411
IC1404
IC1407
IC1413
IC1421
IC1412
IC1651
IC1652
IC1653
IC1654
IC1655
IC1656
Q1401
Q1403
Q1404
Q1651
Q1652
L1651
X1651
24LC128P
24LC08B
ANP1945-A
AWZ6460
YG-H2
D1664
D1663
D1662
D1665
D1661
D1667
D1670
D1668
D1669
D1651
D1657
D1656
D1655
D1654
D1673
D1674
D1675
D1677
D1652
D1401
D1407
F1401
F1402
L1413
L1416
L1418
L1424
L1425
401
IC1402 IC1409
IC1420 Q1404
Q1403 IC1410
IC1407
IC1413
IC1421
Q1401
IC1411
IC1412
IC1651
IC1654
Q1651
IC1655
IC1653
IC1652
Q1652
IC1656

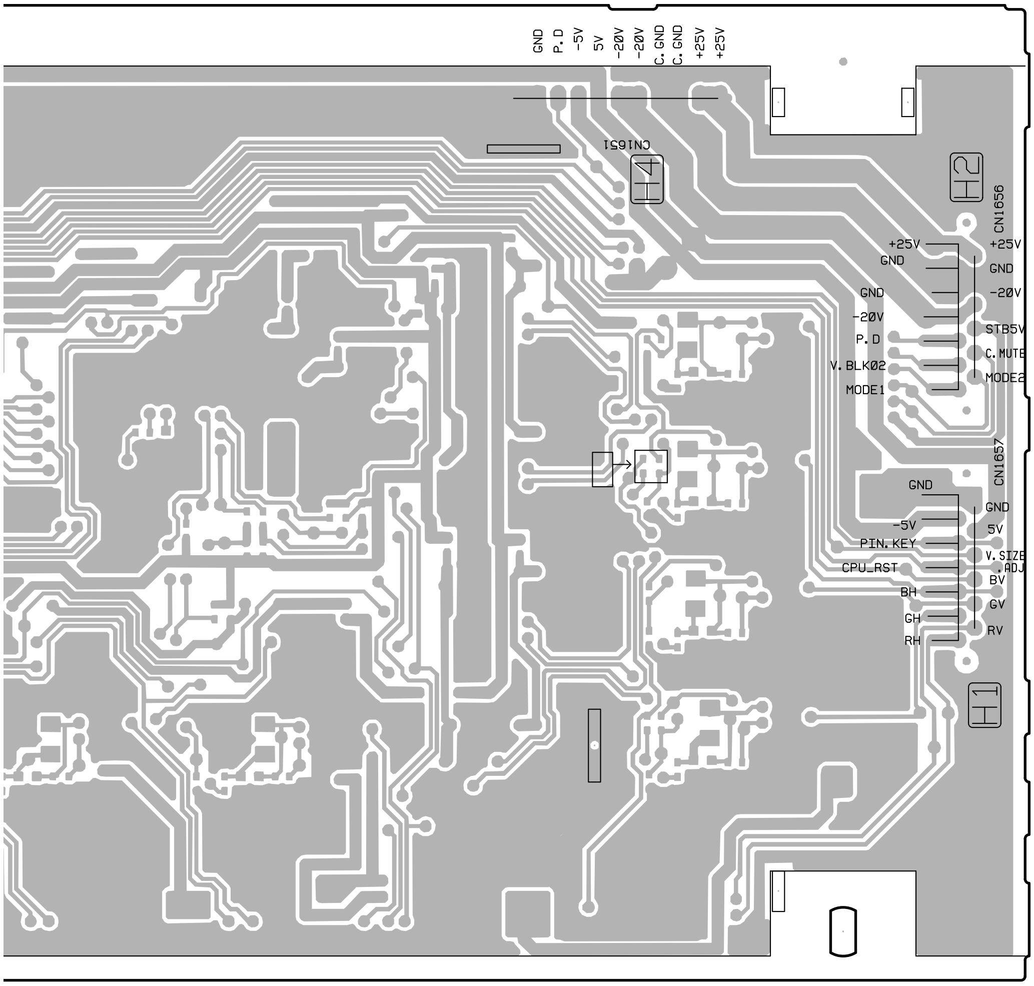
(ANP1945–A)

I DIGITAL CONV. ASSY

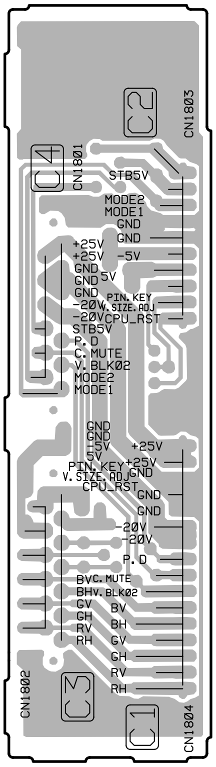

CV-R
CV-G
CV-B
CV-BLK
GND
V.BLK2
SCCY
DH.BLK
V.BLK0
PIN.KEY
H.V.PARA
CPU_RST
GND
CN1652
CN1653
R1731
IC1410
IC1656
IC1652

SIDE B

J CONNECTOR ASSY


GND
P.D
-5V
5V
-20V
-20V
C.GND
C.GND
+25V
+25V
CN1651
H4
H2
CN1656
+25V
GND
GND
-20V
P.D
V.BLK02
MODE1
+25V
GND
-20V
STB5V
C.MUTE
MODE2
CN1657
GND
-5V
PIN.KEY
CPU_RST
BH
GH
RH
GND
5V
V.SIZE .ADJ
BV
GV
RV
H1

(ANP1945–A)

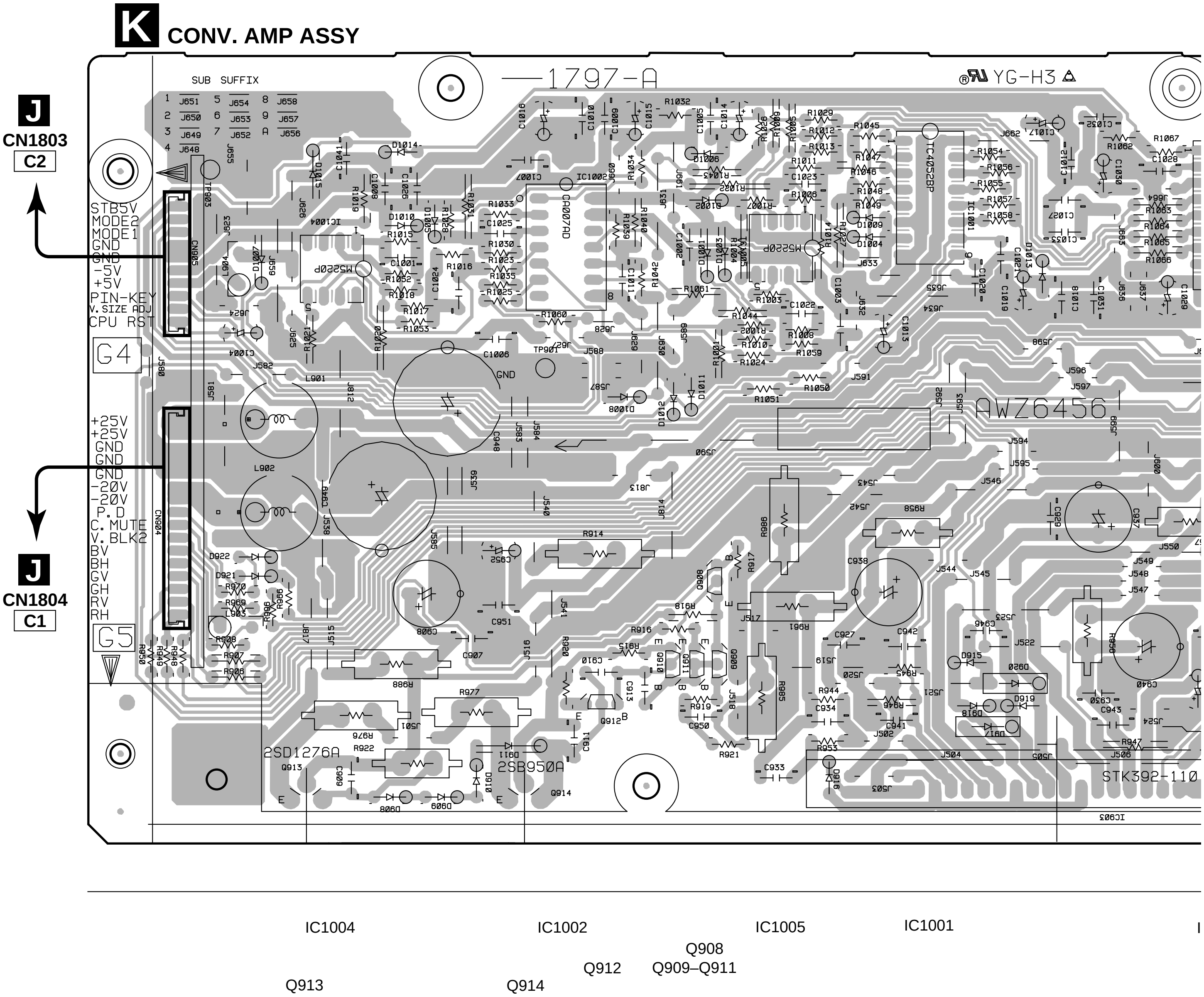

C2
CN1803
C4
CN1801
STB5V
MODE2
MODE1
GND
GND
+25V
+25V
-5V
GND
GND
5V
GND
PIN.KEY
-20V
V.SIZE.ADJ
-20V
CPU_RST
STB5V
P.D
C.MUTE
V.BLK02
MODE2
MODE1
GND
GND
-5V
+25V
5V
+25V
PIN.KEY
V.SIZE.ADJ
GND
CPU_RST
GND
GND
-20V
-20V
P.D
BV
C.MUTE
BH
V.BLK02
GV
BV
GH
BH
RV
GV
RH
GH
RV
RH
CN1802
C3
C1
CN1804

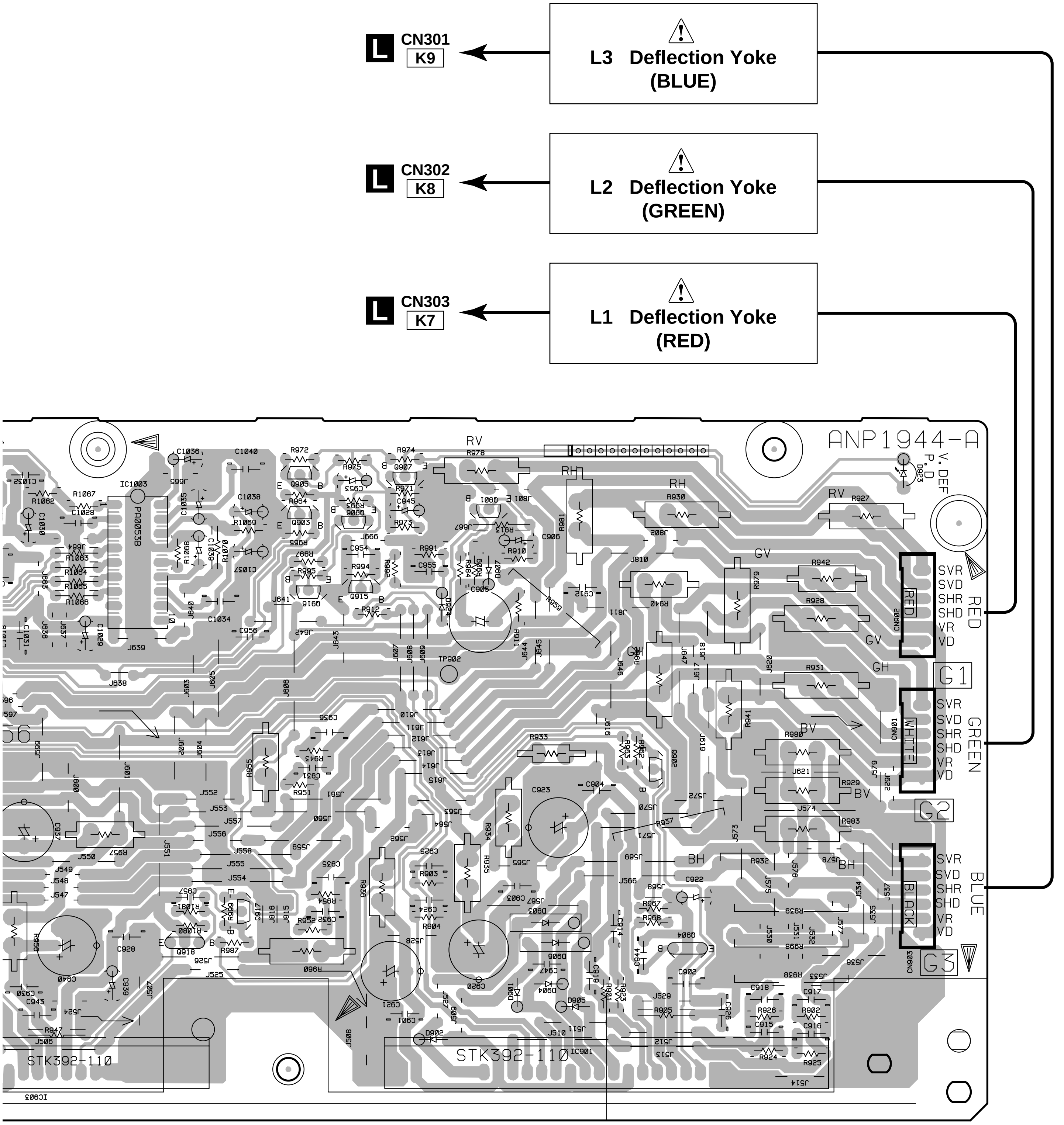
(ANP1945–A)

4.7 CONV. AMP ASSY

SIDE A

K CONV. AMP ASSY


J
CN1803
C2
J
CN1804
C1
1797-A
YG-H3
SUB SUFFIX
STB5V
MODE2
MODE1
GND
GND
-5V
+5V
PIN-KEY
V.SIZE ADJ
CPU RST
G4
+25V
+25V
GND
GND
GND
-20V
-20V
P.D
C.MUTE
V.BLK2
BV
BH
GV
GH
RV
RH
G5
CN905
CN904
IC4052BP
CA0070AD
M5220P
AWZ6456
2SD1276A
2SB950A
STK392-110
IC1004
IC1002
IC1005
IC1001
Q908
Q909–Q911
Q912
Q913
Q914


L
CN301
K9
L3 Deflection Yoke
(BLUE)
L
CN302
K8
L2 Deflection Yoke
(GREEN)
L
CN303
K7
L1 Deflection Yoke
(RED)
ANP1944-A
V.DEF
P.D
D923
RV
RH
GV
GH
BV
BH
SVR
SVD
SHR
SHD
VR
VD
RED
CN902
GREEN
WHITE
CN901
BLUE
BLACK
CN903
G1
G2
G3
IC1003
PA0053B
STK392-110
IC901
IC903
TP902

(ANP1944–A)

Q903 Q905 Q906 Q907 Q901
IC1003 Q916 Q915
Q902
Q918 Q917 Q904

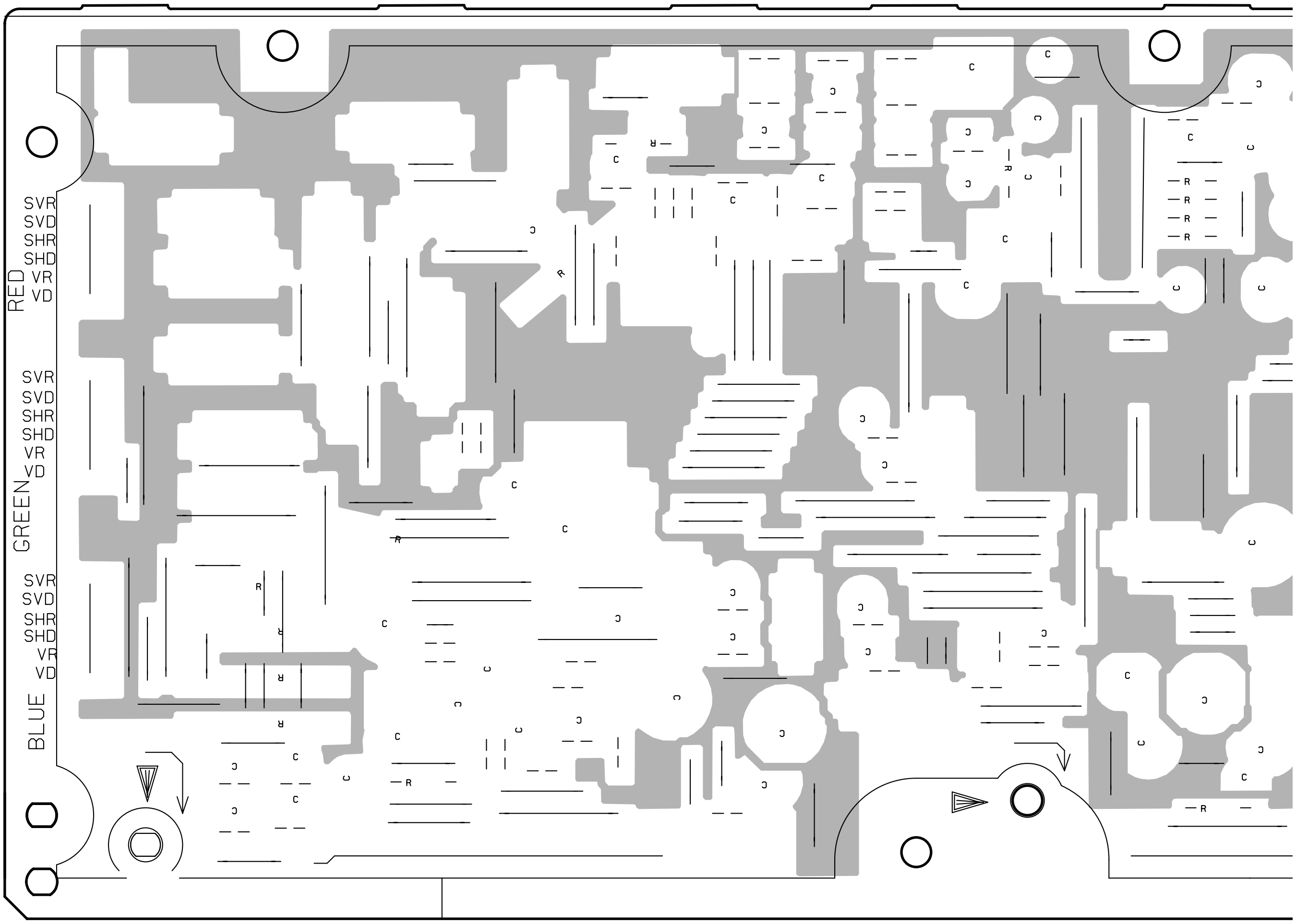
A

B

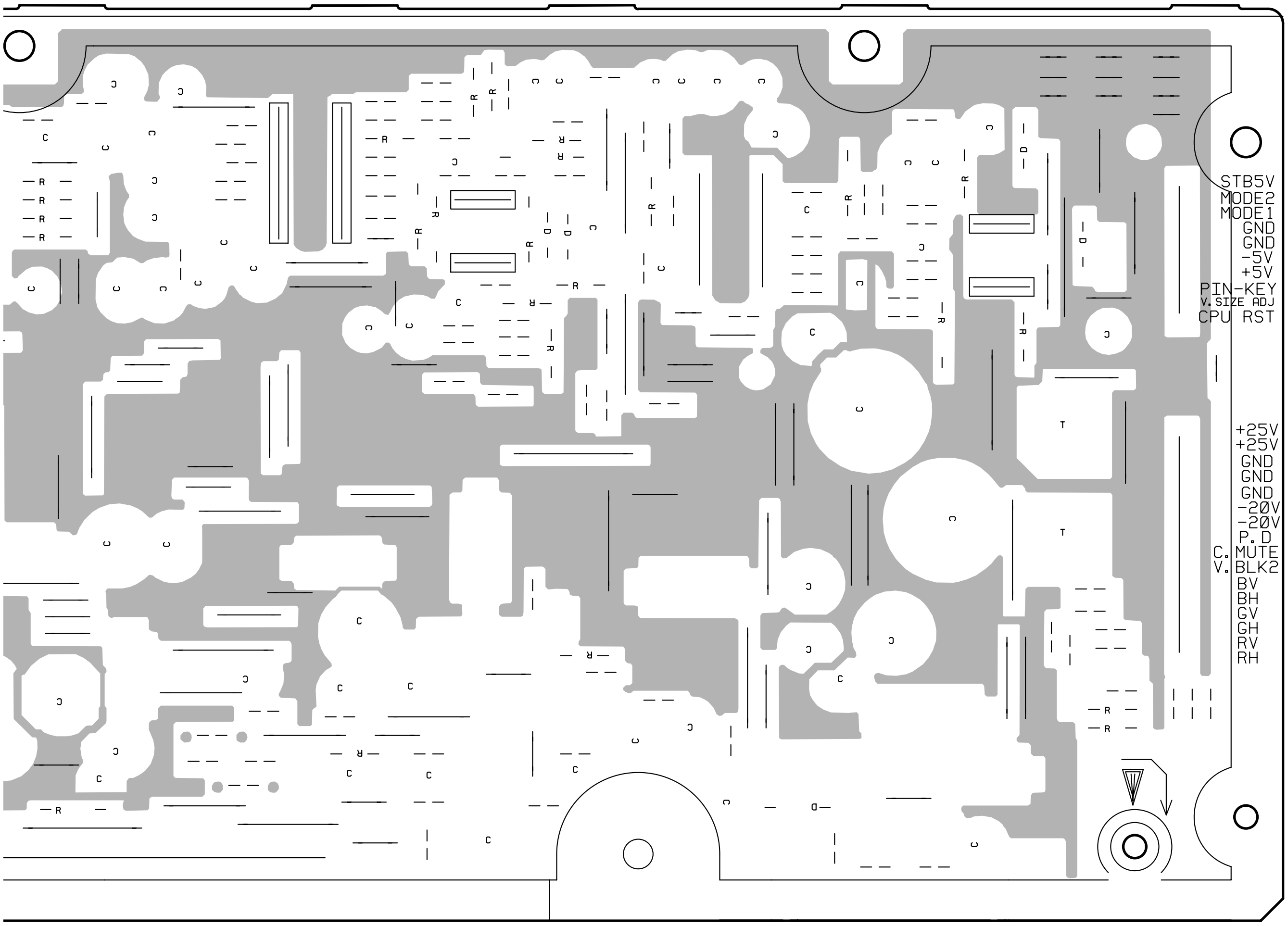
C

D

K CONV. AMP ASSY


SVR
SVD
SHR
SHD
VR
VD
RED
SVR
SVD
SHR
SHD
VR
VD
GREEN
SVR
SVD
SHR
SHD
VR
VD
BLUE
C
R

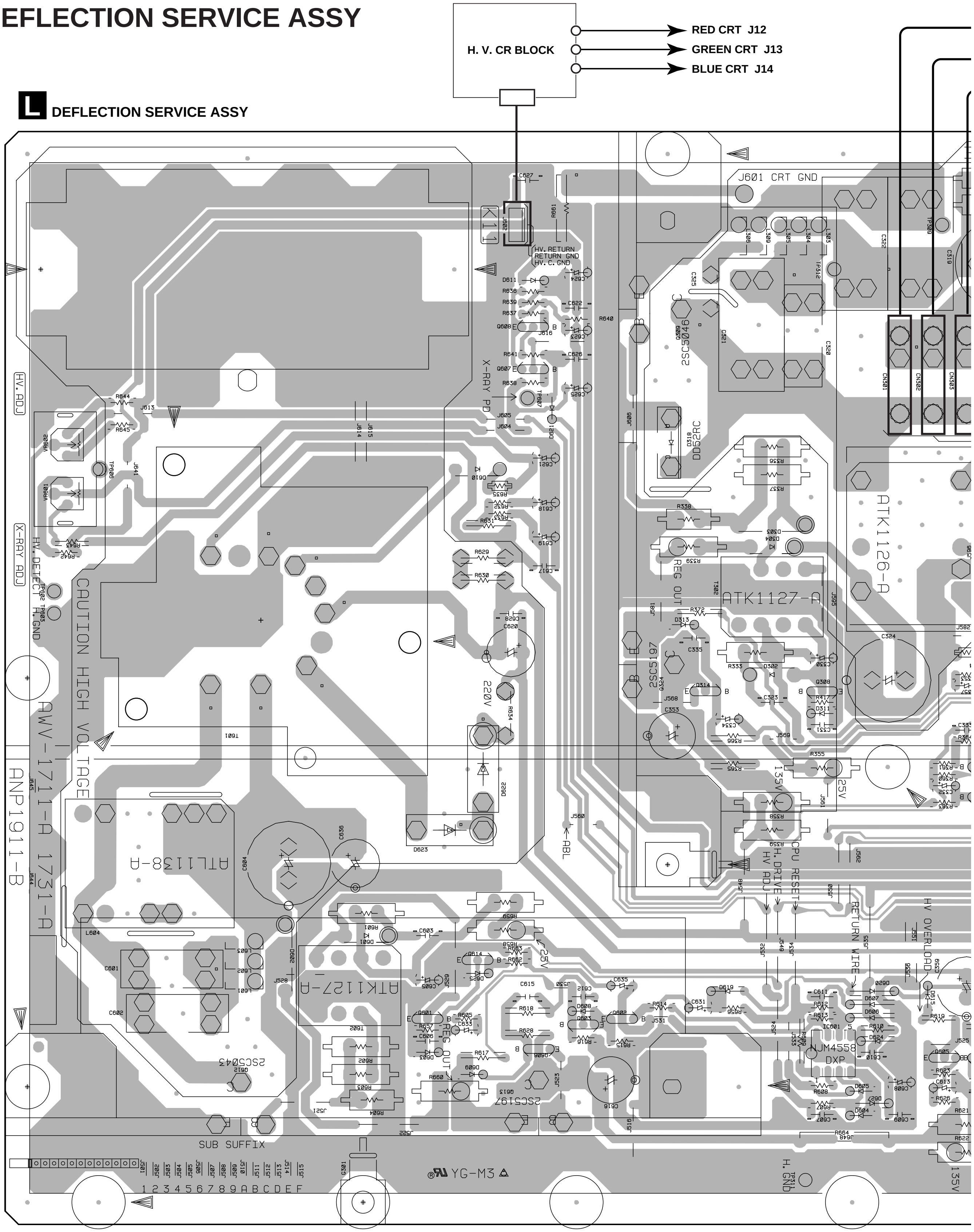
SIDE B


STB5V
MODE2
MODE1
GND
GND
-5V
+5V
PIN-KEY
V.SIZE ADJ
CPU RST
+25V
+25V
GND
GND
GND
-20V
-20V
P.D
C.MUTE
V.BLK2
BV
BH
GV
GH
RV
RH
C
R
D
T

(ANP1944–A)

L-a

4.8 DEFLECTION SERVICE ASSY


H. V. CR BLOCK
RED CRT J12
GREEN CRT J13
BLUE CRT J14
L DEFLECTION SERVICE ASSY
HV. RETURN
RETURN GND
HV. C. GND
J601 CRT GND
X-RAY PD
HV. ADJ
X-RAY ADJ
H.V. DETECT
H.GND
CAUTION HIGH VOLTAGE
2SC5046
DD52RC
ATK1126-A
ATK1127-A
REG OUT
2SC5197
220V
AWV-1711-A 1731-A
ANP1911-B
ATL1138-A
ABL
135V
25V
CPU RESET
H.DRIVE
HV ADJ
RETURN WIRE
HV OVERLOAD
NJM4558
DXP
2SC5043
SUB SUFFIX
1 2 3 4 5 6 7 8 9 A B C D E F
YG-M3
H. GND

VR601 VR602

Q607 Q608 Q309

Q324 Q314 Q308

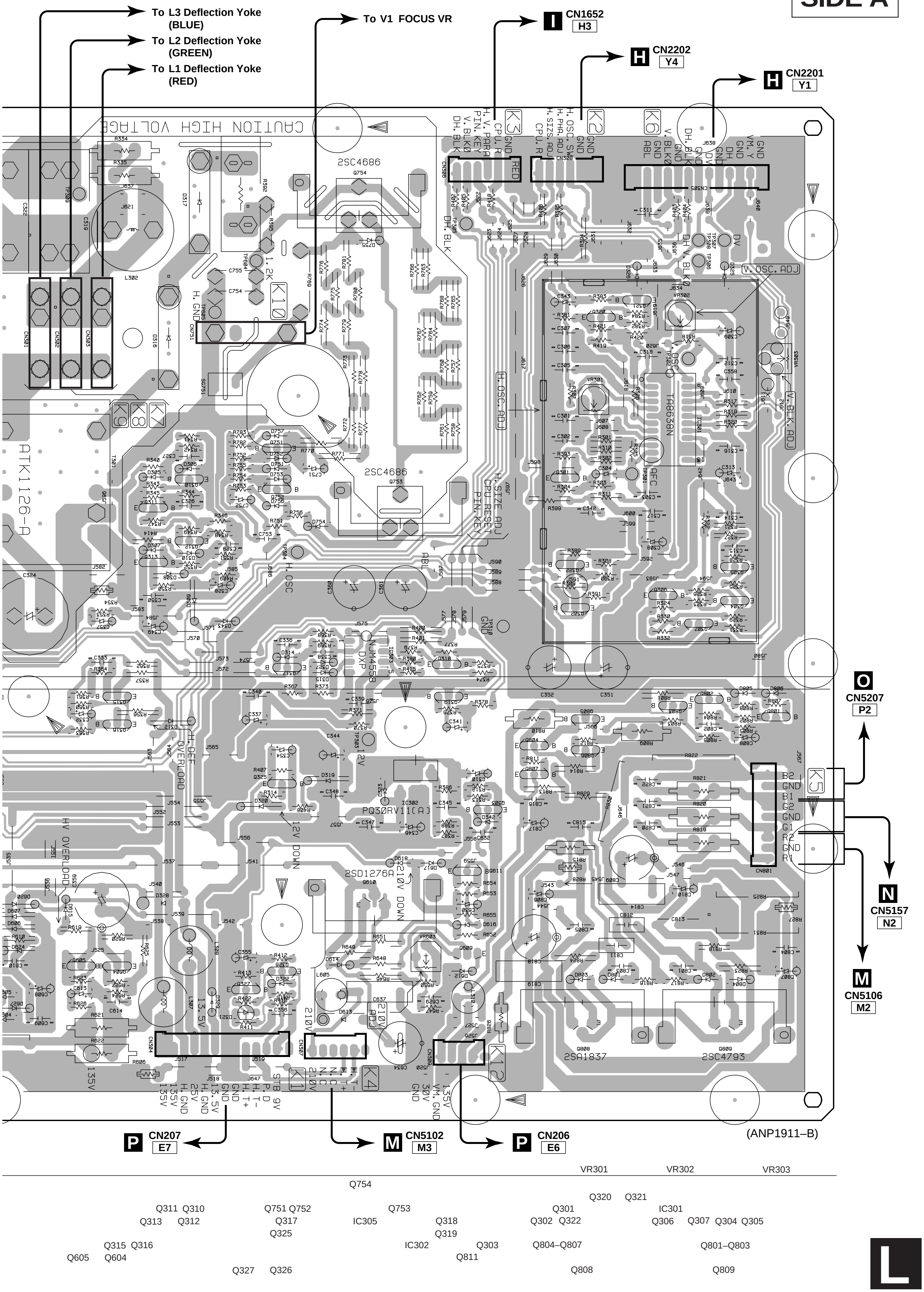
Q601 Q614

Q606 Q603 Q602 IC601 Q605

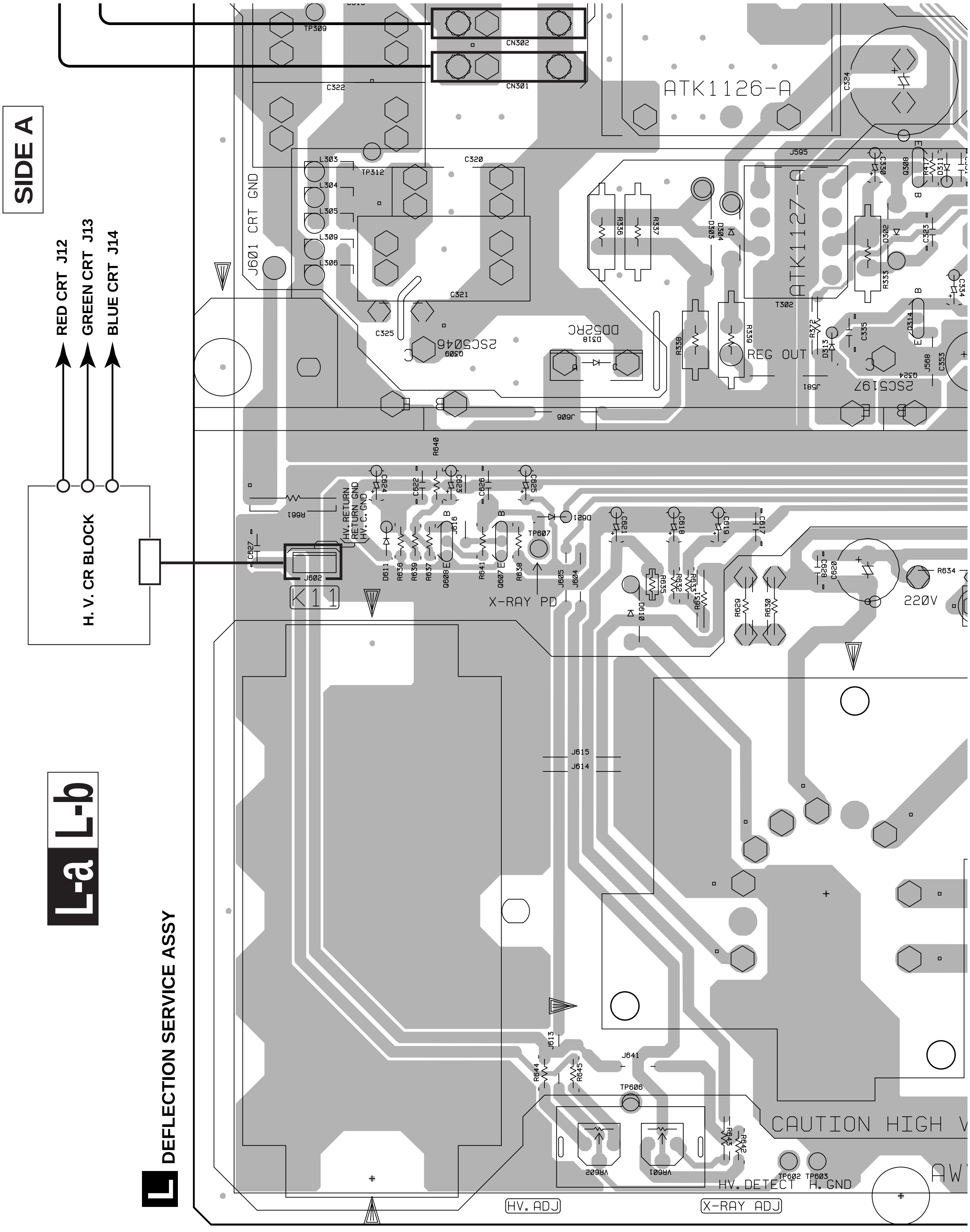
Q612 Q613

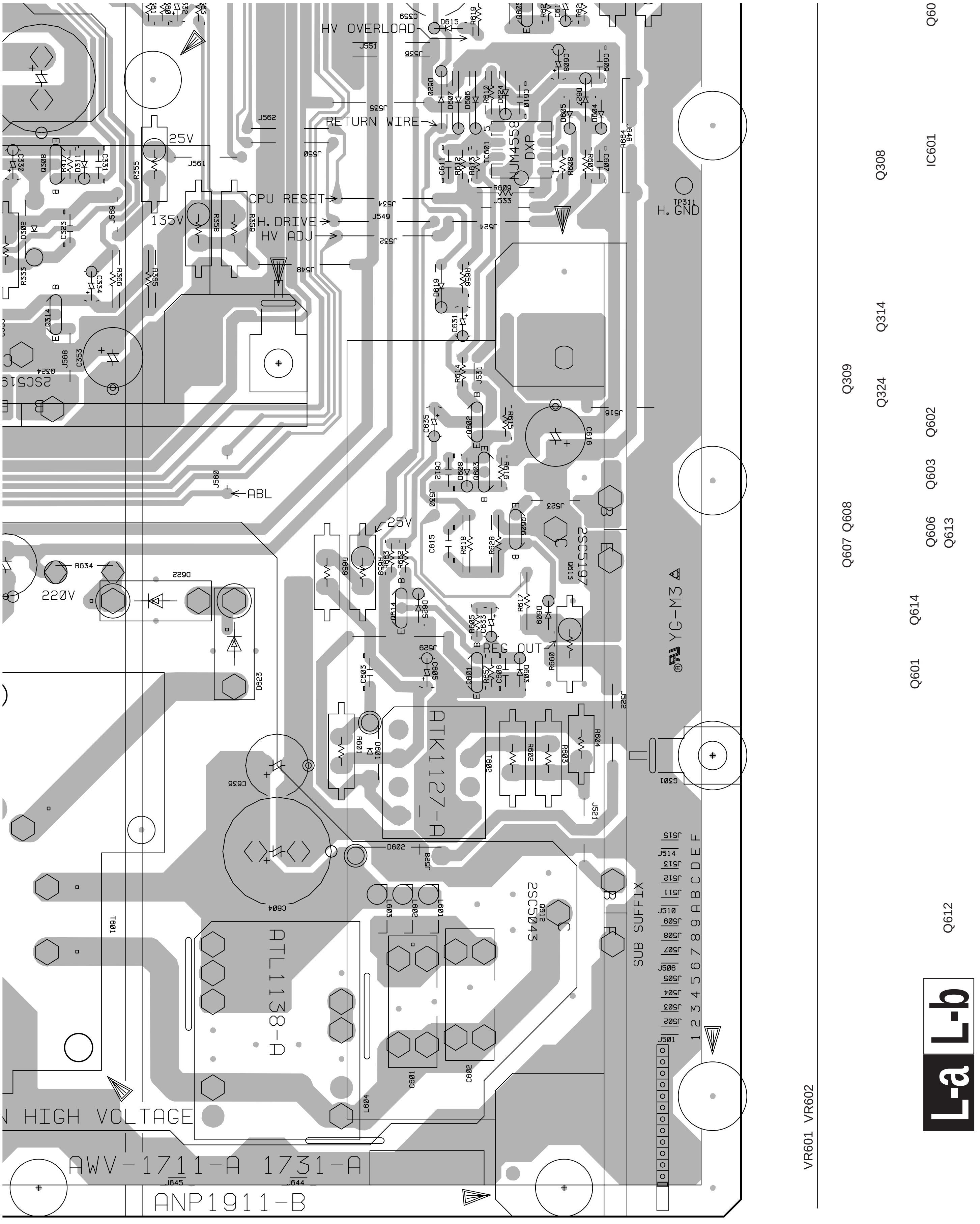
L-b

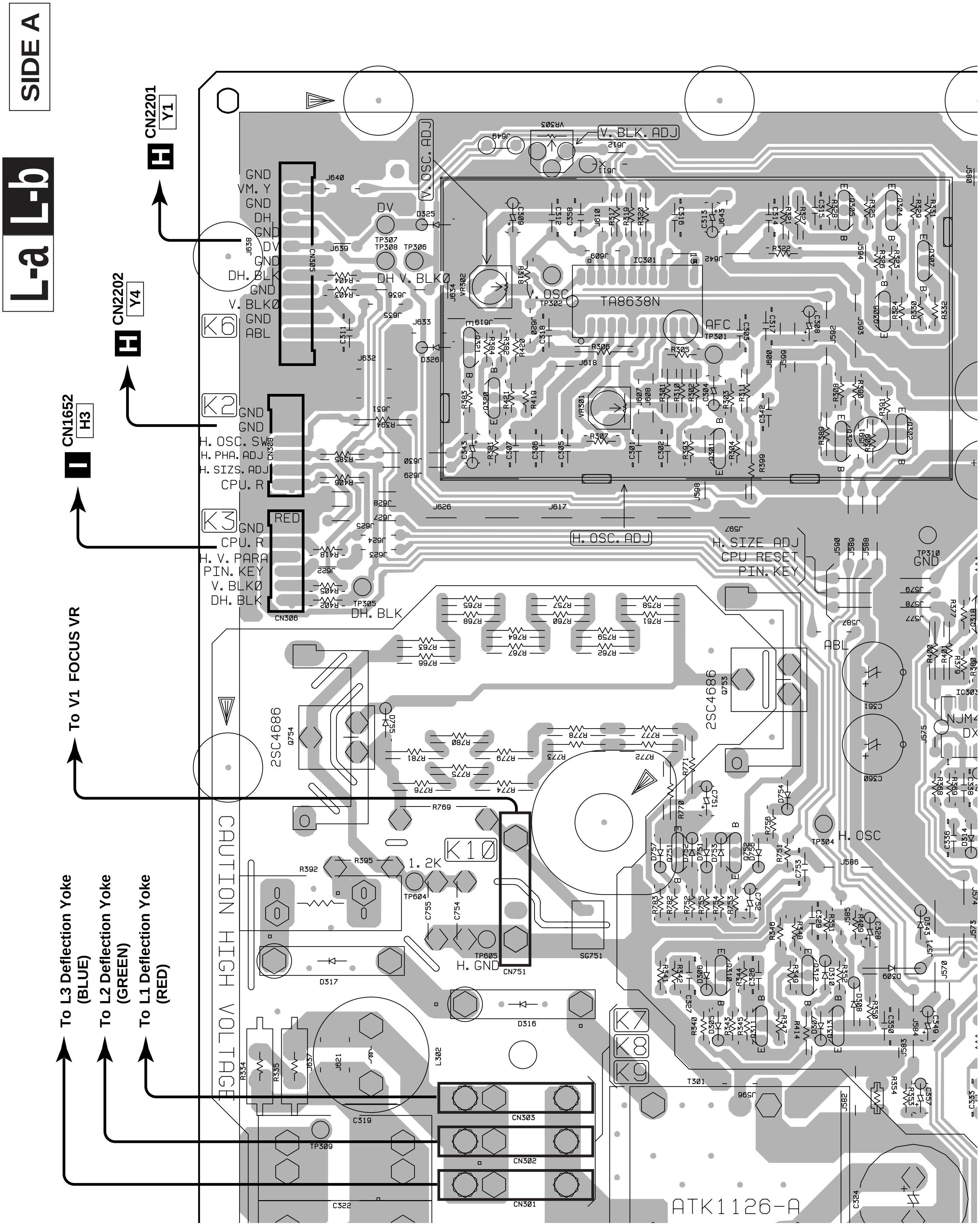
SIDE A

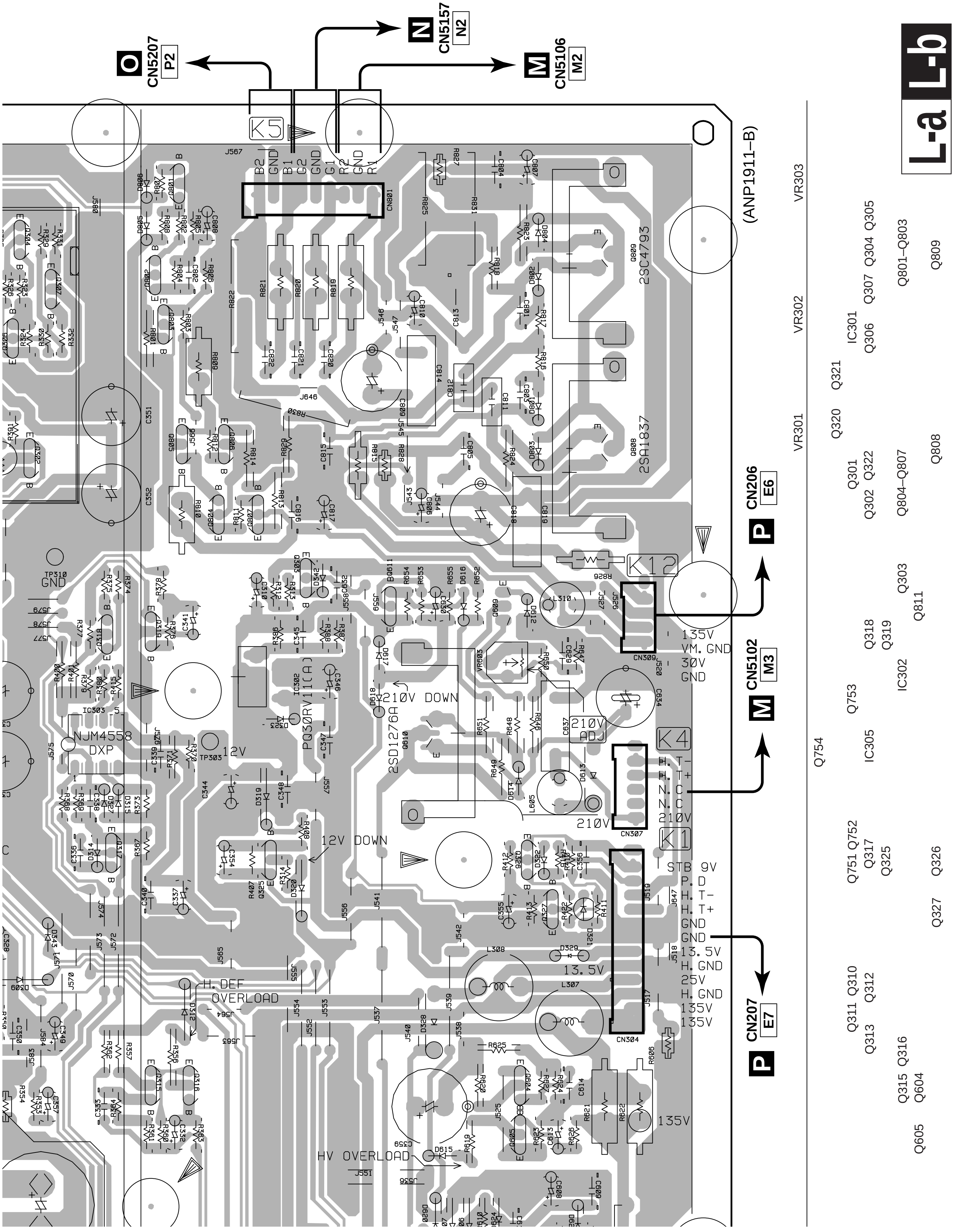

To L3 Deflection Yoke
(BLUE)
To L2 Deflection Yoke
(GREEN)
To L1 Deflection Yoke
(RED)
To V1 FOCUS VR
I CN1652
H3
H CN2202
Y4
H CN2201
Y1
O CN5207
P2
N CN5157
N2
M CN5106
M2
P CN207
E7
M CN5102
M3
P CN206
E6
(ANP1911–B)
CAUTION HIGH VOLTAGE
ATK1126-A
2SC4686
2SD1276A
2SA1837
2SC4793
TA8638N
NJM4558DXP
PQ30RV11(A)
H. OSC. ADJ
V. OSC. ADJ
V. BLK. ADJ
H. SIZE ADJ
HV OVERLOAD
H. DEF OVERLOAD
12V DOWN
210V DOWN
210V ADJ
K1
K2
K3
K4
K5
K6
K7
K8
K9
K10
K12
VR301
VR302
VR303
Q754
Q320 Q321
Q311 Q310
Q751 Q752
Q753
Q301
IC301
Q313 Q312
Q317
IC305
Q318
Q302 Q322
Q306 Q307 Q304 Q305
Q325
Q319
Q315 Q316
IC302
Q303
Q804–Q807
Q801–Q803
Q605 Q604
Q811
Q327 Q326
Q808
Q809

A
B
C
D

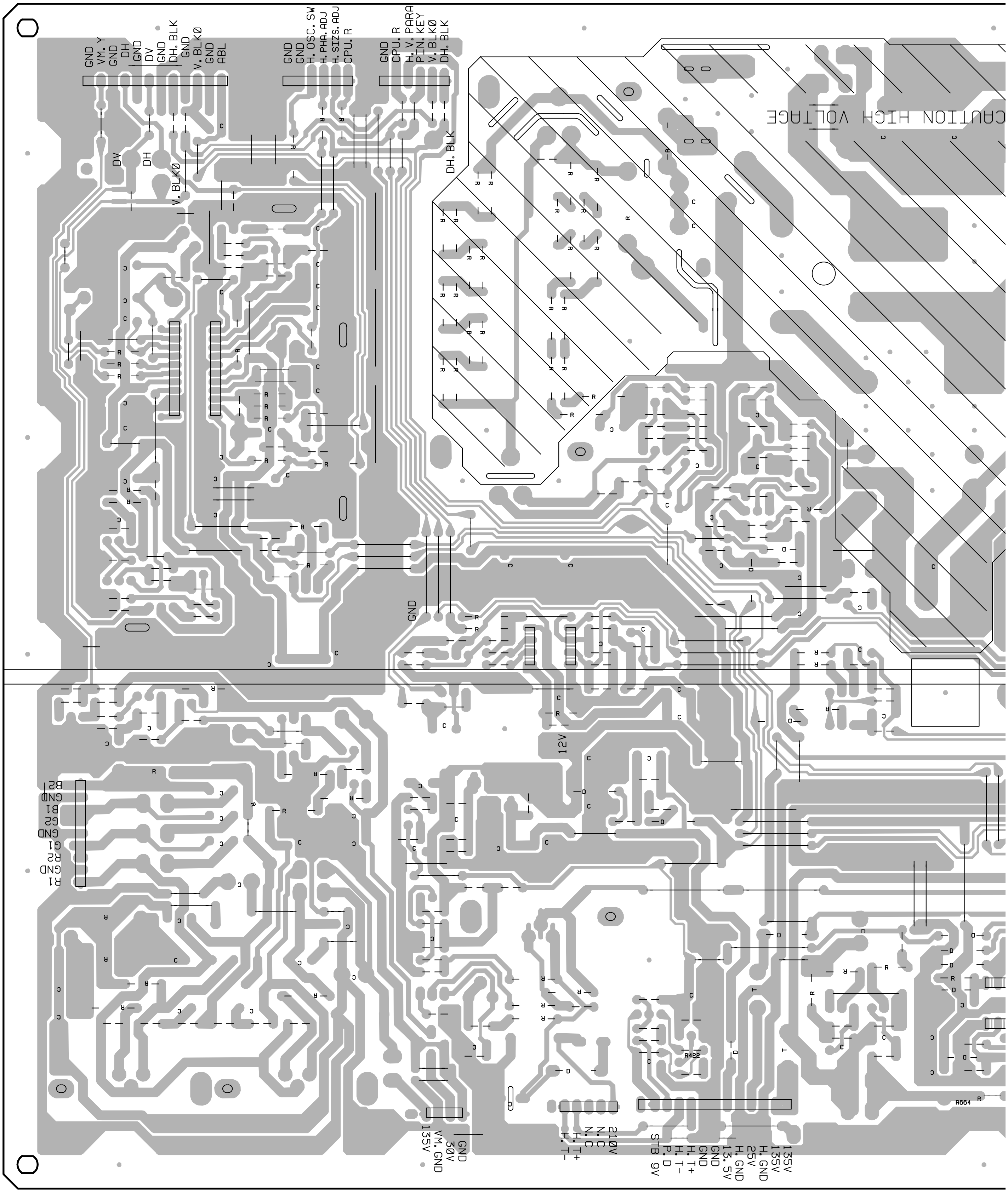

1
2
3
4
A
B
C
D
SIDE A
RED CRT J12
GREEN CRT J13
BLUE CRT J14
H. V. CR BLOCK
L-a
L-b
L
DEFLECTION SERVICE ASSY
TP309
CN302
CN301
C322
ATK1126-A
C324
L303
L304
L305
L309
L306
TP312
C320
C321
C325
J601 CRT GND
2SC5046
Q309
DD52RC
D318
R336
R337
D305
D304
J595
ATK1127-A
T302
D302
C323
R333
C334
R338
R339
REG OUT
R372
D313
C335
D314
J568
C353
2SC5197
Q324
J581
J606
R640
C624
C622
C293
C626
C625
R661
HV. RETURN
RETURN GND
HV. C. GND
D621
C621
C618
C619
C617
C627
J602
K11
D611
R636
R639
R637
Q608
J616
R641
Q607
R638
TP607
J605
J604
X-RAY PD
R635
R632
R633
R631
D610
R629
R630
C628
C620
R634
220V
J615
J614
J613
J641
R644
R645
TP606
R643
R642
VR602
VR601
CAUTION HIGH V
AW
TP602
TP603
HV. DETECT
H. GND
HV. ADJ
X-RAY ADJ


HV OVERLOAD
RETURN WIRE
25V
135V
CPU RESET
H.DRIVE
HV ADJ
ABL
NJM4558DXP
IC601
TP311
H.GND
2SC5197
25V
220V
REG OUT
YG-M3
ATK1127-A
2SC5043
ATL1138-A
SUB SUFFIX
HIGH VOLTAGE
AWV-1711-A 1731-A
ANP1911-B
Q60
IC601
Q308
Q314
Q309
Q324
Q602
Q603
Q608
Q607
Q606
Q613
Q614
Q601
Q612
VR601 VR602
L-a
L-b

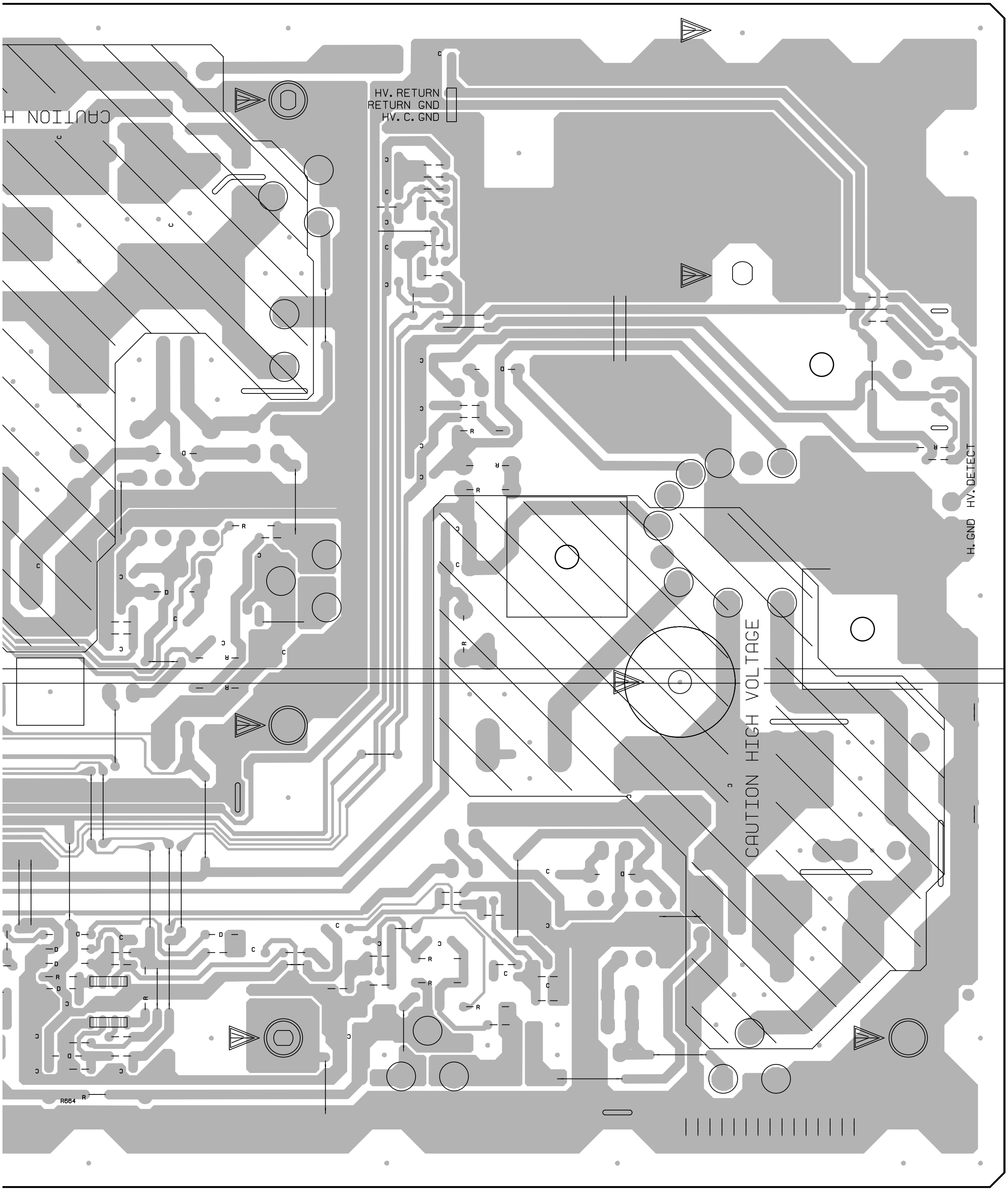

SIDE A
L-a
L-b
H
CN2201
Y1
H
CN2202
Y4
I
CN1652
H3
To V1 FOCUS VR
To L3 Deflection Yoke (BLUE)
To L2 Deflection Yoke (GREEN)
To L1 Deflection Yoke (RED)
GND
VM. Y
GND
DH
GND
DV
GND
DH. BLK
GND
V. BLK0
GND
ABL
CN305
K6
K2
GND
GND
H. OSC. SW
H. PHA. ADJ
H. SIZS. ADJ
CPU. R
CN308
K3
RED
GND
CPU. R
H. V. PARA
PIN. KEY
V. BLK0
DH. BLK
CN306
DV
DH
V. BLK0
TP307
TP308
TP306
TP305
DH. BLK
V. OSC. ADJ
V. BLK. ADJ
VR303
VR302
VR301
V. OSC
TP302
IC301
TA8638N
AFC
TP301
H. OSC. ADJ
H. SIZE ADJ
CPU RESET
PIN. KEY
TP310
GND
ABL
C361
C360
IC303
NJM4
2SC4686
Q753
2SC4686
Q754
K10
1. 2K
TP604
TP605
H. GND
CN751
SG751
TP304
H. OSC
D317
D316
K7
K8
K9
CAUTION HIGH VOLTAGE
L302
C319
TP309
C322
CN303
CN302
CN301
T301
C324
ATK1126-A


L-a L-b
O CN5207 P2
N CN5157 N2
M CN5106 M2
K5
B2 GND B1 G2 GND G1 R2 GND R1
CN801
(ANP1911–B)
2SC4793
2SA1837
Q809
Q808
VR303
VR302
VR301
P CN206 E6
K12
CN309
135V
VM.GND
30V
GND
M CN5102 M3
K4
H.T-
H.T+
N.C
N.C
210V
CN307
210V DOWN
210V ADJ
2SD1276A
PQ30RV11(A)
NJM4558 DXP
IC303
IC302
12V
TP303
TP310 GND
12V DOWN
K1
STB 9V
P.D
H.T-
H.T+
GND
GND
13.5V
H.GND
25V
H.GND
135V
135V
CN304
P CN207 E7
13.5V
H.DEF OVERLOAD
HV OVERLOAD
135V
L310
L308
L307
L605
Q305
Q304
Q307
Q801–Q803
Q809
IC301
Q306
Q321
Q320
Q301
Q322
Q302
Q804–Q807
Q808
Q303
Q811
Q318
Q319
IC302
Q753
Q754
IC305
Q752
Q751
Q317
Q325
Q326
Q327
Q310
Q311
Q312
Q313
Q316
Q315
Q604
Q605

L DEFLECTION SERVICE ASSY


GND
VM.Y
GND
DH
GND
DV
GND
DH.BLK
GND
V.BLK0
GND
ABL
GND
GND
H.OSC.SW
H.PHA.ADJ
H.SIZS.ADJ
CPU.R
GND
CPU.R
H.V.PARA
PIN.KEY
V.BLK0
DH.BLK
DV
DH
V.BLK0
DH.BLK
CAUTION HIGH VOLTAGE
GND
12V
B2
GND
B1
G2
GND
G1
R2
GND
R1
R422
R664
135V
VM.GND
30V
GND
210V
N.C
N.C
H.T+
H.T-
STB 9V
P.D
H.T-
H.T+
GND
GND
13.5V
25V
H.GND
135V
135V
H.GND

SIDE B



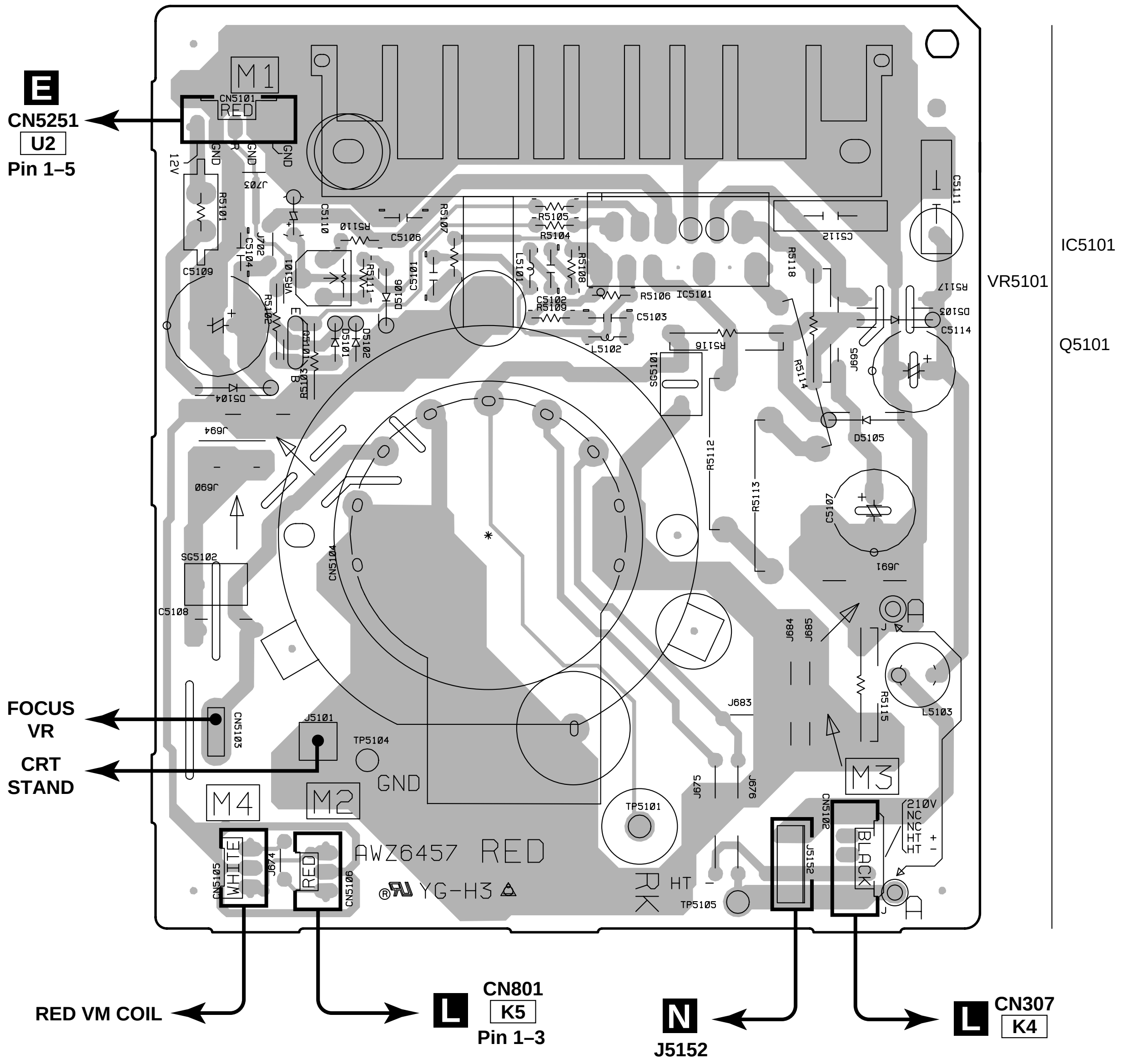
HV.RETURN
RETURN GND
HV.C.GND
CAUTION H
CAUTION HIGH VOLTAGE
H.GND
HV.DETECT
R664
A
B
C
D

(ANP1911–B)

4.9 R CRT DRIVE ASSY

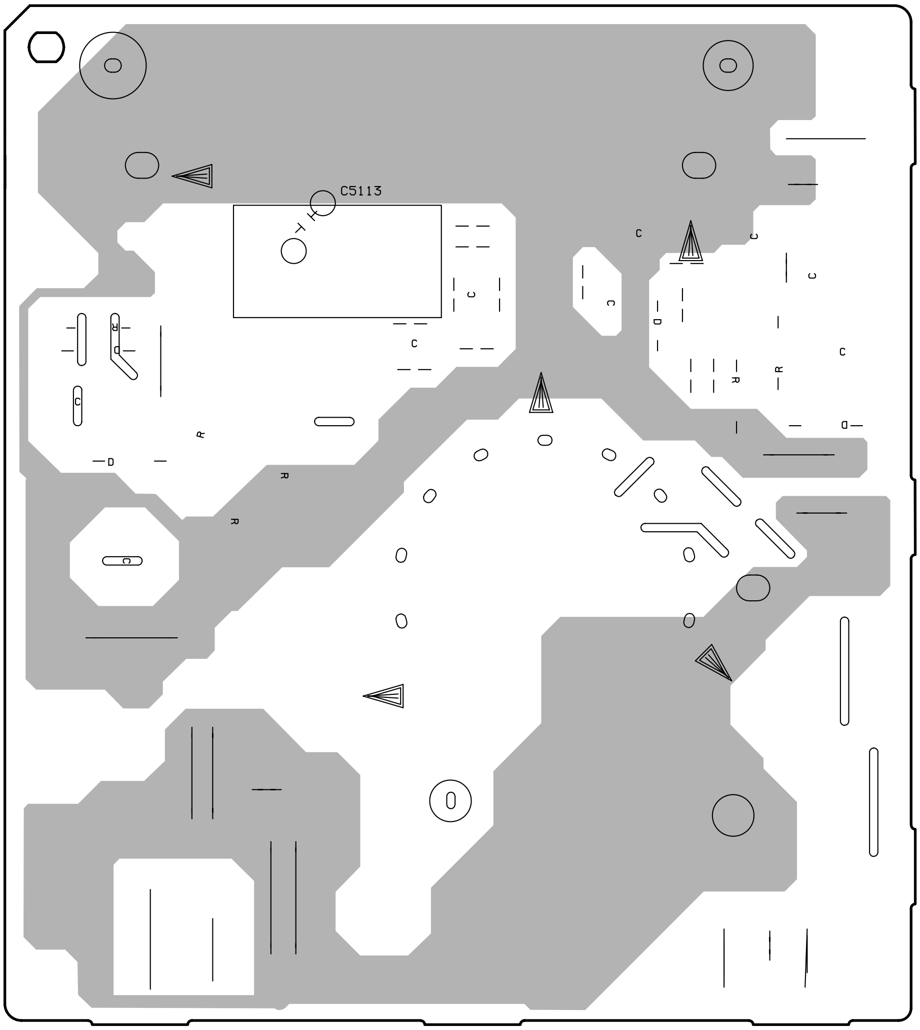
SIDE A

M **R CRT DRIVE ASSY** (ANP1944–A)


E
CN5251
U2
Pin 1–5
FOCUS VR
CRT STAND
RED VM COIL
L
CN801
K5
Pin 1–3
N
J5152
L
CN307
K4
IC5101
VR5101
Q5101
M1
CN5101
RED
12V
GND
R
GND
GND
M2
M3
M4
CN5102
BLACK
210V
NC
NC
HT +
HT −
J5152
CN5105
WHITE
CN5106
RED
CN5103
CN5104
J5101
TP5101
TP5104
TP5105
GND
HT
AWZ6457 RED
YG-H3
RK
C5101
C5102
C5103
C5104
C5106
C5107
C5108
C5109
C5110
C5111
C5112
C5114
D5101
D5102
D5103
D5104
D5105
D5106
L5101
L5102
L5103
R5101
R5102
R5103
R5104
R5105
R5106
R5107
R5108
R5109
R5110
R5111
R5112
R5113
R5114
R5115
R5116
R5117
R5118
SG5101
SG5102
IC5101
VR5101
J675
J676
J683
J684
J685
J690
J691
J694
J695
J702
J703
J674

SIDE B

M R CRT DRIVE ASSY

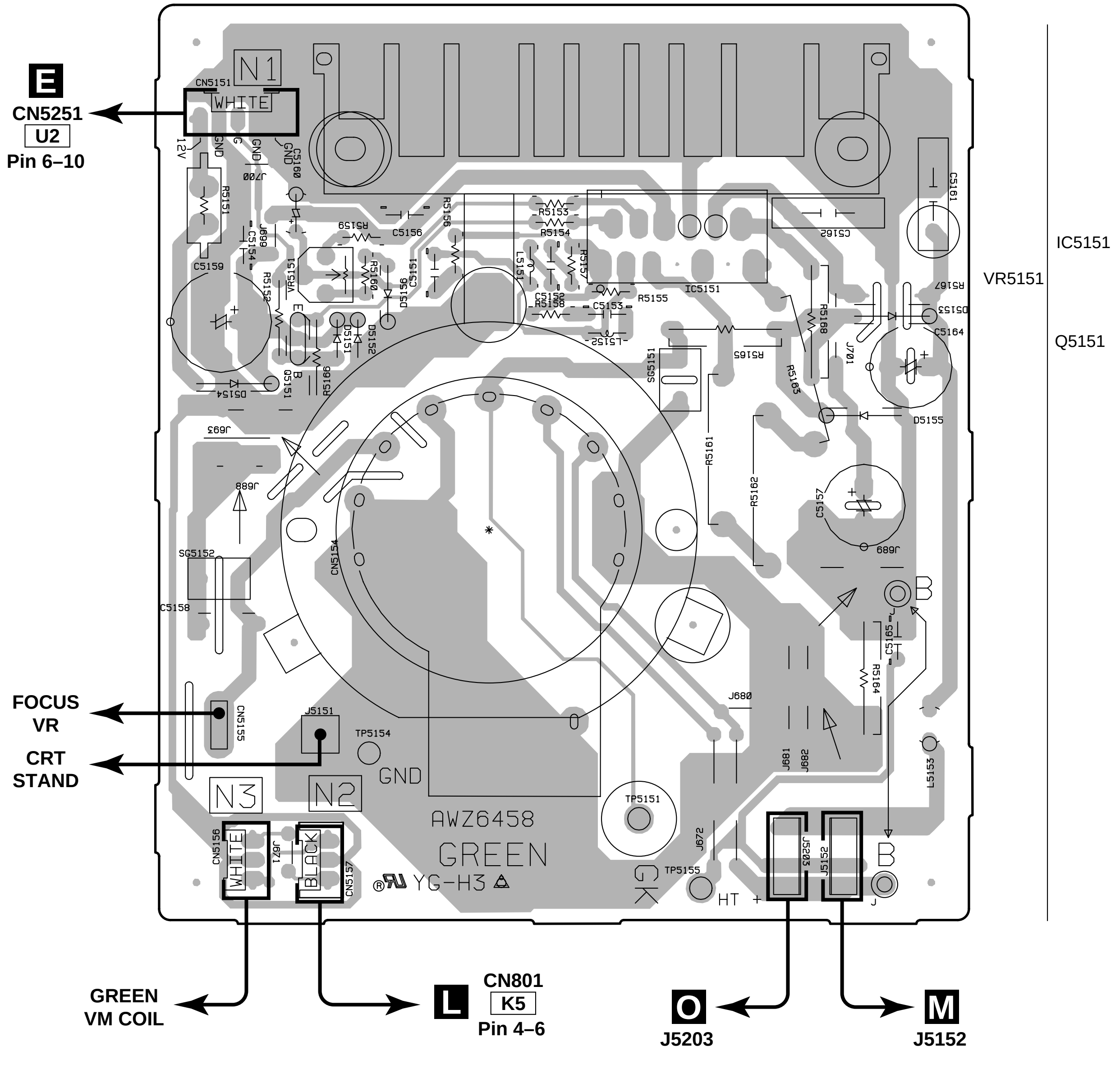


(ANP1944–A)

4.10 G CRT DRIVE ASSY

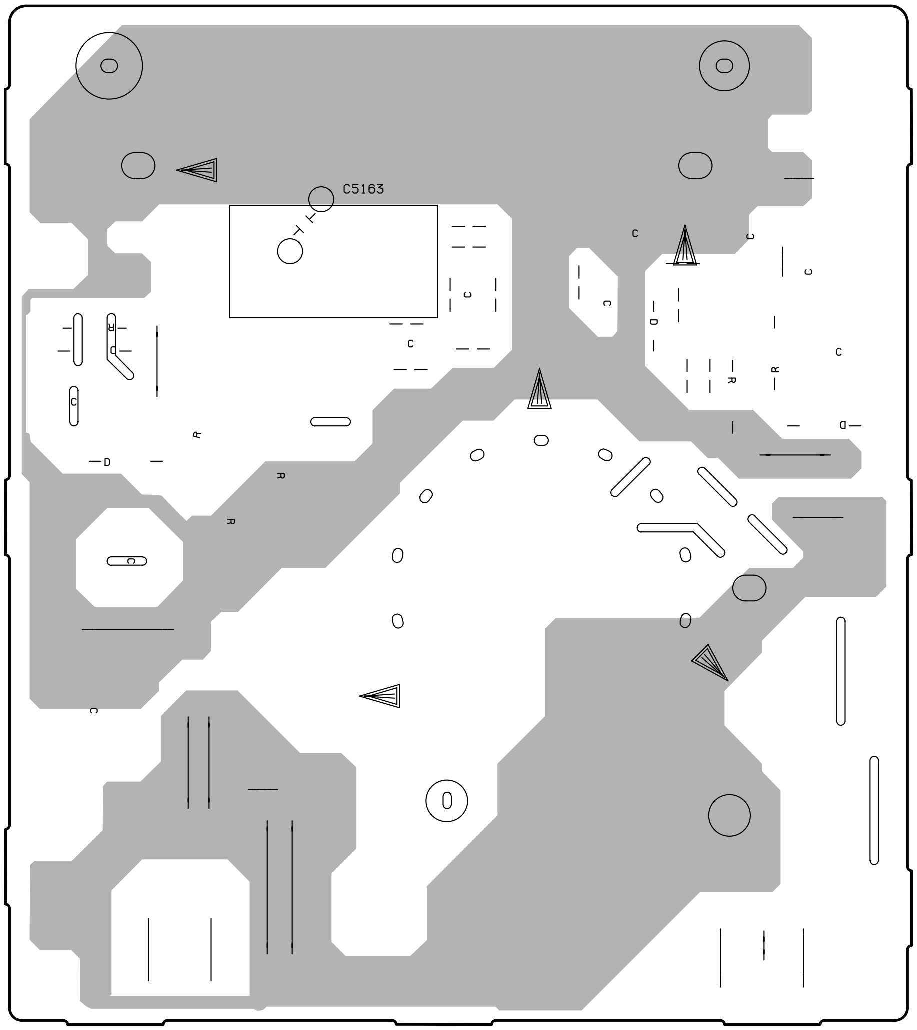
SIDE A

N G CRT DRIVE ASSY (ANP1944–A)


E
CN5251
U2
Pin 6–10
FOCUS
VR
CRT
STAND
GREEN
VM COIL
L
CN801
K5
Pin 4–6
O
J5203
M
J5152
IC5151
VR5151
Q5151
N1
N2
N3
CN5151
WHITE
12V
GND
G
GND
GND
C5160
J700
R5151
J699
C5154
C5159
R5152
VR5151
R5159
R5160
C5156
D5156
C5151
R5156
L5151
R5153
R5154
R5157
C5152
R5158
C5153
L5152
R5155
IC5151
C5161
C5162
R5167
D5153
C5164
R5168
J701
R5165
R5163
SG5151
D5151
D5152
Q5151
R5166
D5154
J693
J688
D5155
R5161
R5162
C5157
J689
CN5154
SG5152
C5158
C5165
R5164
J680
CN5155
J5151
TP5154
GND
J681
J682
L5153
TP5151
AWZ6458
GREEN
YG-H3
CN5156
WHITE
J671
BLACK
CN5157
J672
J5203
J5152
TP5155
G K
HT +
B
J

SIDE B

N G CRT DRIVE ASSY


C5163
C
R
D
(ANP1944–A)

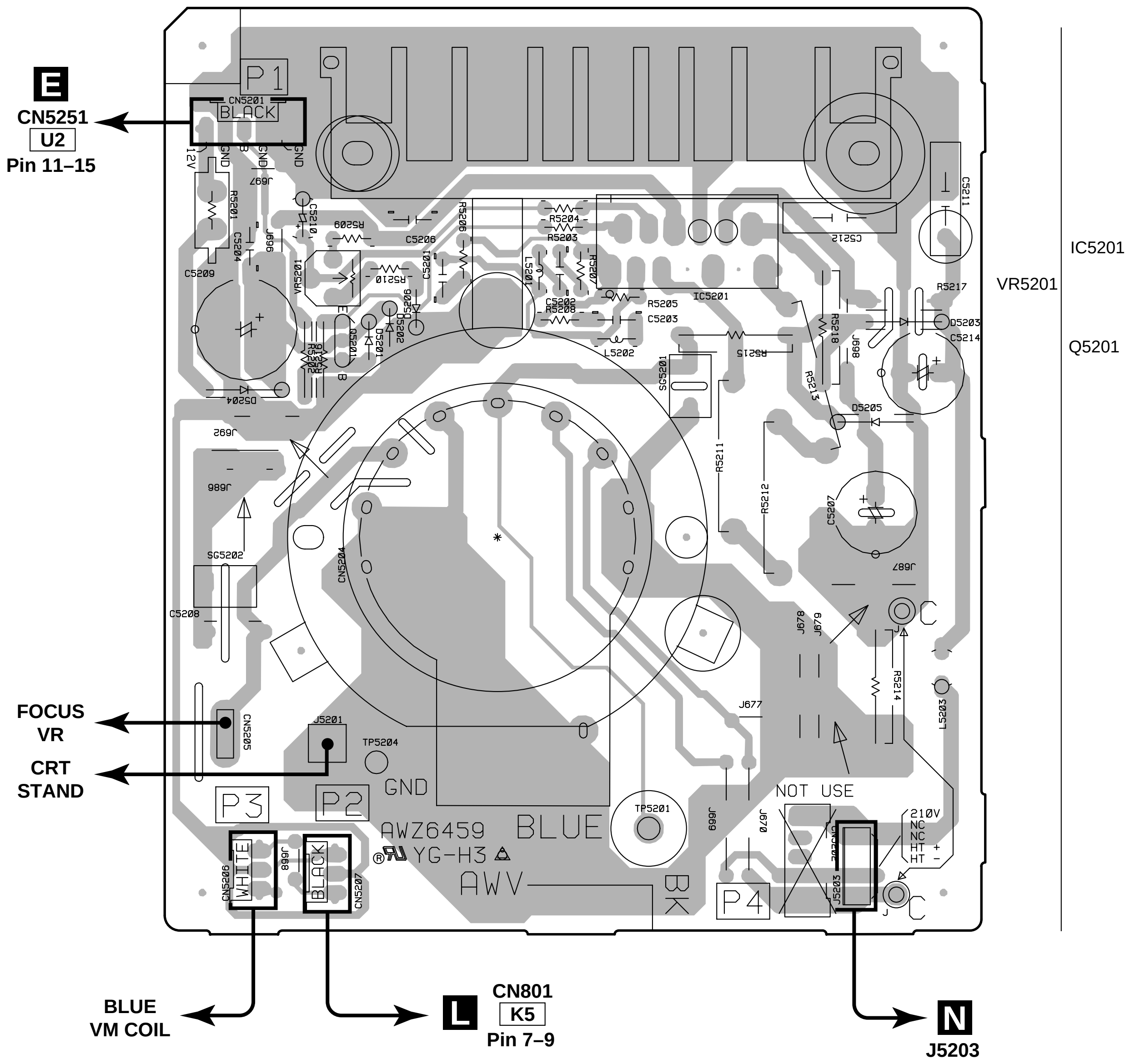
4.11 B CRT DRIVE ASSY

A

SIDE A

B

O **B CRT DRIVE ASSY** (ANP1944–A)

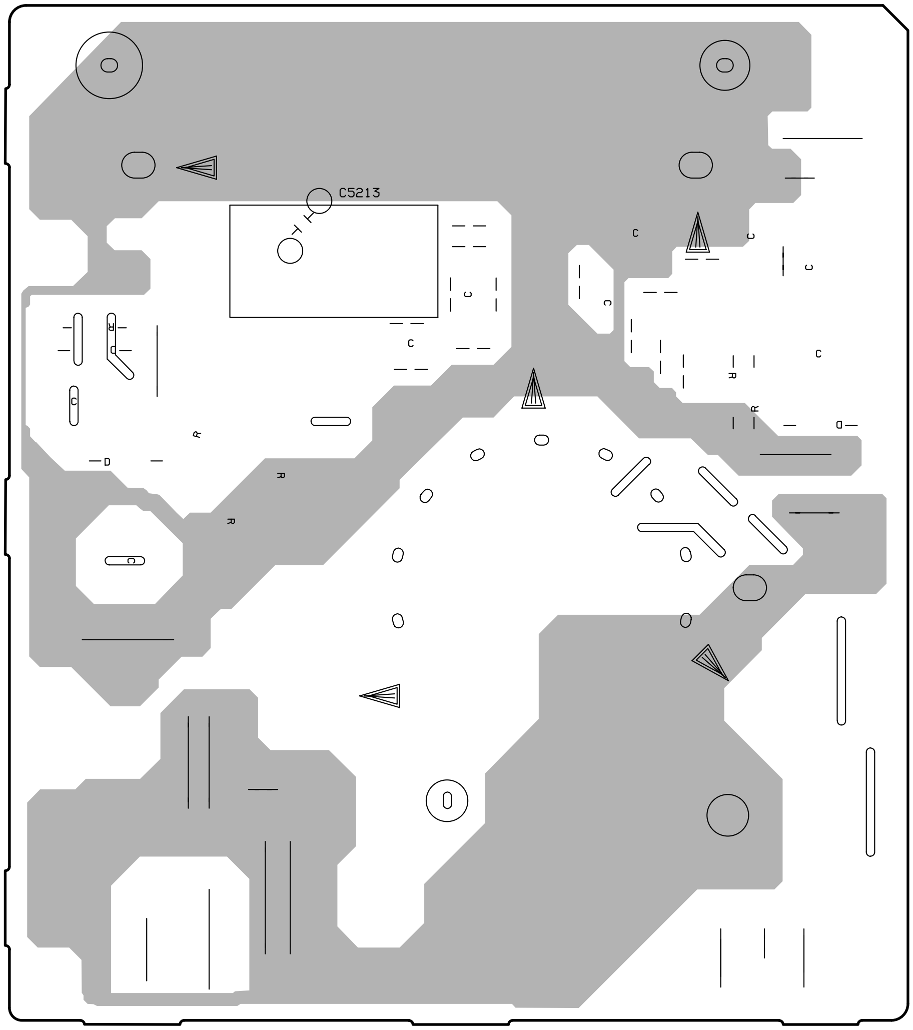

E
CN5251
U2
Pin 11–15
CN5201
BLACK
12V
GND
B
GND
C
GND
P1
J697
R5201
C5204
C5209
J696
VR5201
C5210
R5209
C5206
R5206
R5210
C5201
D5206
D5202
D5201
R5204
R5203
L5201
R5207
C5202
R5208
R5205
C5203
L5202
IC5201
C5212
C5211
R5217
R5218
J698
D5203
C5214
R5215
SG5201
R5213
D5205
D5204
J692
J686
SG5202
C5208
CN5204
R5211
R5212
C5207
J687
J678
J679
R5214
L5203
J677
CN5205
J5201
TP5204
GND
P3
P2
AWZ6459
BLUE
YG-H3
AWV
TP5201
J669
J670
NOT USE
210V
NC
NC
HT +
HT –
J5203
BK
P4
CN5206
WHITE
J668
BLACK
CN5207
IC5201
VR5201
Q5201
FOCUS VR
CRT STAND
BLUE VM COIL
L
CN801
K5
Pin 7–9
N
J5203

C

D

SIDE B

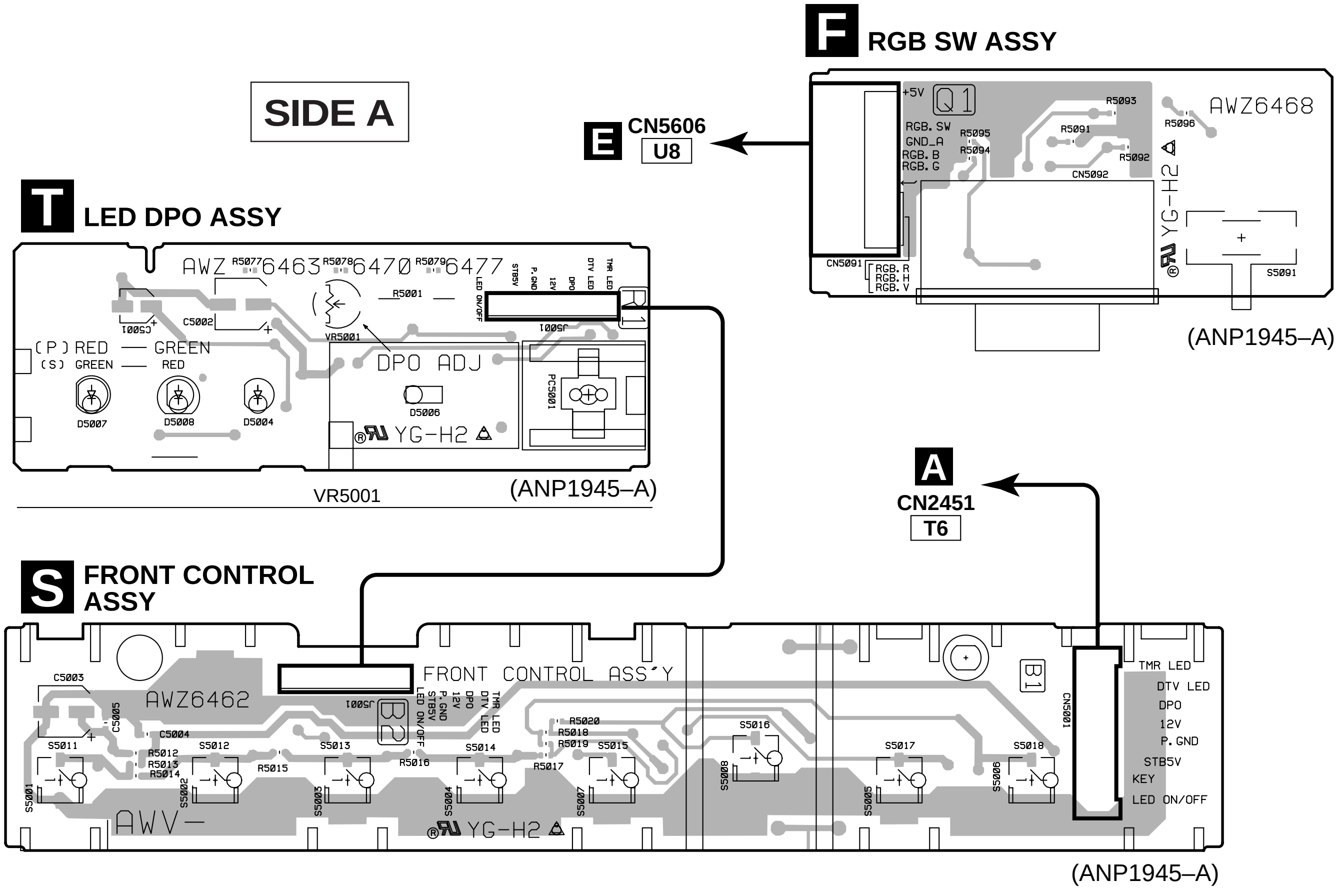
O G CRT DRIVE ASSY

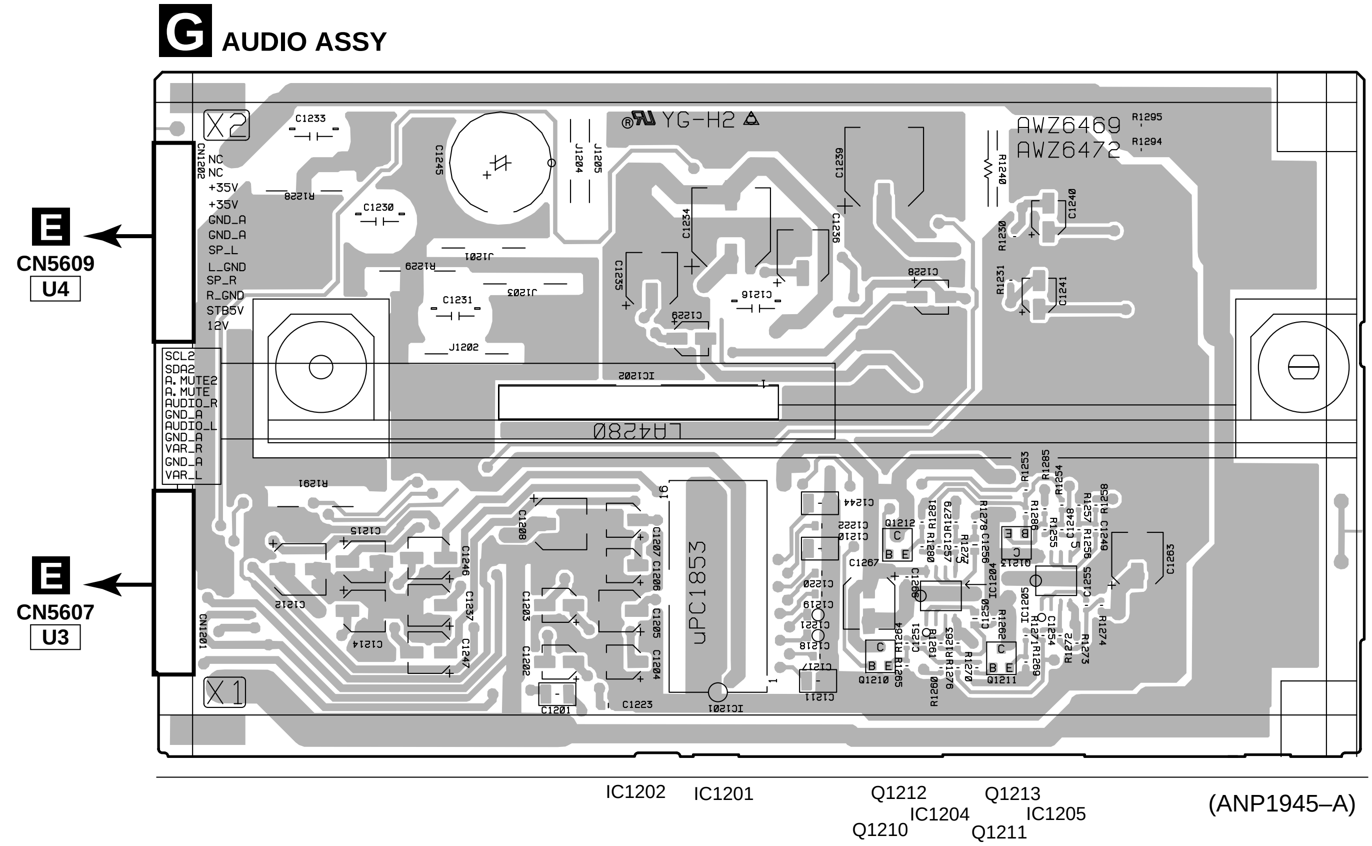


(ANP1944–A)

4.12 AUDIO ASSY, RGB SW ASSY, FRONT CONTROL ASSY and AUDIO ASSY

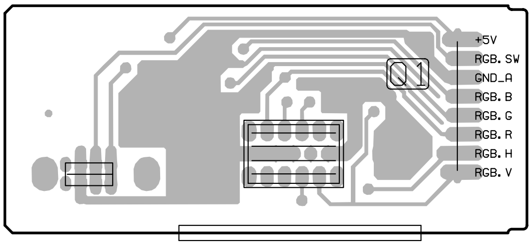
SIDE A


F RGB SW ASSY
E CN5606 U8
+5V
Q1
RGB. SW
GND_A
RGB. B
RGB. G
CN5091
RGB. R
RGB. H
RGB. V
CN5092
AWZ6468
YG-H2
S5091
(ANP1945–A)
T LED DPO ASSY
AWZ 6463 6470 6477
C5002
J5002
(P) RED — GREEN
(S) GREEN — RED
D5007
D5008
D5004
VR5001
DPO ADJ
D5006
PC5001
R5001
J5001
YG-H2
VR5001
(ANP1945–A)
A CN2451 T6
S FRONT CONTROL ASSY
AWZ6462
FRONT CONTROL ASS'Y
J5001
B2
B1
CN5001
TMR LED
DTV LED
DPO
12V
P. GND
STB5V
KEY
LED ON/OFF
S5011
S5012
S5013
S5014
S5015
S5016
S5017
S5018
S5001
S5002
S5003
S5004
S5007
S5008
S5005
S5006
AWV-
YG-H2
(ANP1945–A)


G AUDIO ASSY
E CN5609 U4
E CN5607 U3
CN1202
NC
NC
+35V
+35V
GND_A
GND_A
SP_L
L_GND
SP_R
R_GND
STB5V
12V
SCL2
SDA2
A. MUTE2
A. MUTE
AUDIO_R
GND_A
AUDIO_L
GND_A
VAR_R
GND_A
VAR_L
CN1201
X2
X1
YG-H2
AWZ6469
AWZ6472
IC1202
LA4280
uPC1853
IC1201
IC1202
IC1201
Q1212
Q1213
IC1204
IC1205
Q1210
Q1211
(ANP1945–A)

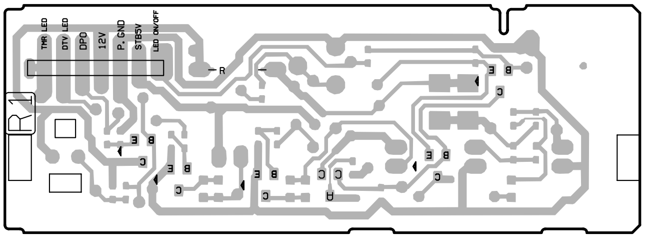
SIDE B

F RGB SW ASSY


+5V
RGB.SW
GND_A
RGB.B
RGB.G
RGB.R
RGB.H
RGB.V
Q1

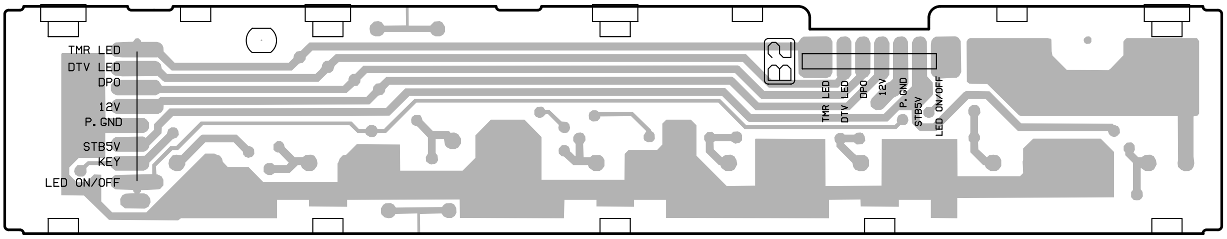
(ANP1945–A)

T LED DPO ASSY


TMR LED
DTV LED
DPO
12V
P.GND
STB5V
LED ON/OFF
R1
R
E B
C

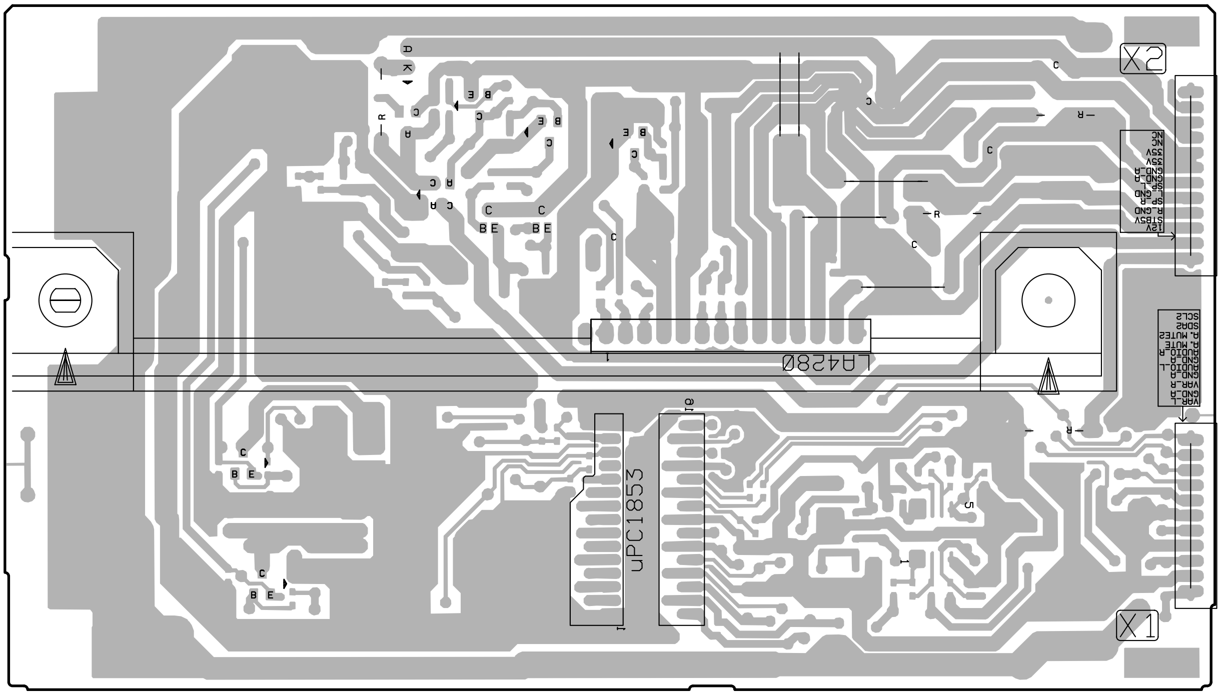
(ANP1945–A)

S FRONT CONTROL ASSY


TMR LED
DTV LED
DPO
12V
P.GND
STB5V
KEY
LED ON/OFF
B2
TMR LED
DTV LED
DPO
12V
P.GND
STB5V
LED ON/OFF

(ANP1945–A)

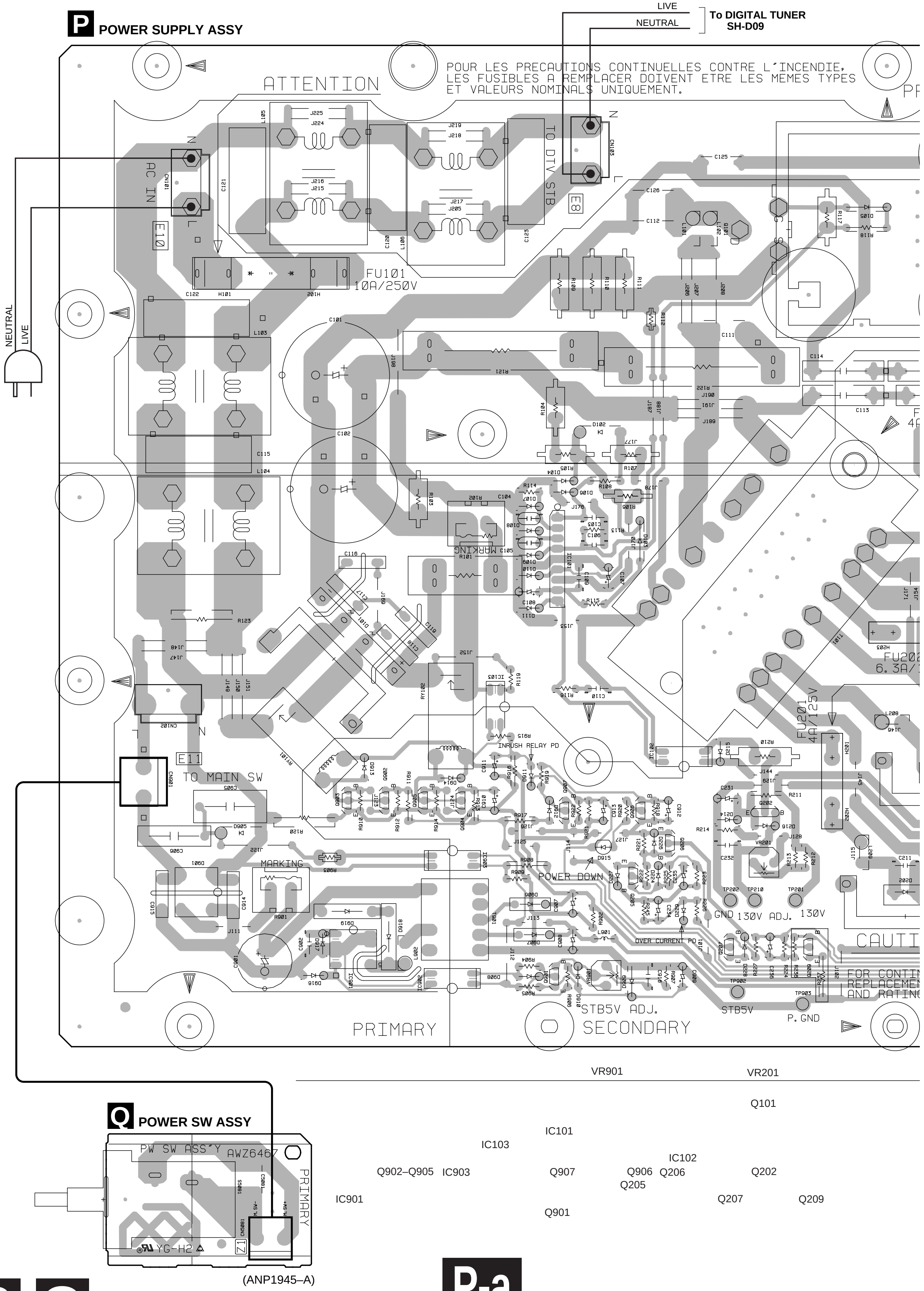
G AUDIO ASSY


X2
X1
LA4280
uPC1853
12V
STB5V
R_GND
SP_R
SP_GND
SP_L
GND_A
GND_A
35V
35V
NC
NC
VAR_L
GND_A
VAR_R
GND_A
AUDIO_L
GND_A
AUDIO_R
A.MUTE
A.MUTE2
SDA2
SCL2
A K
R
C
B E
1
10
5

(ANP1945–A)

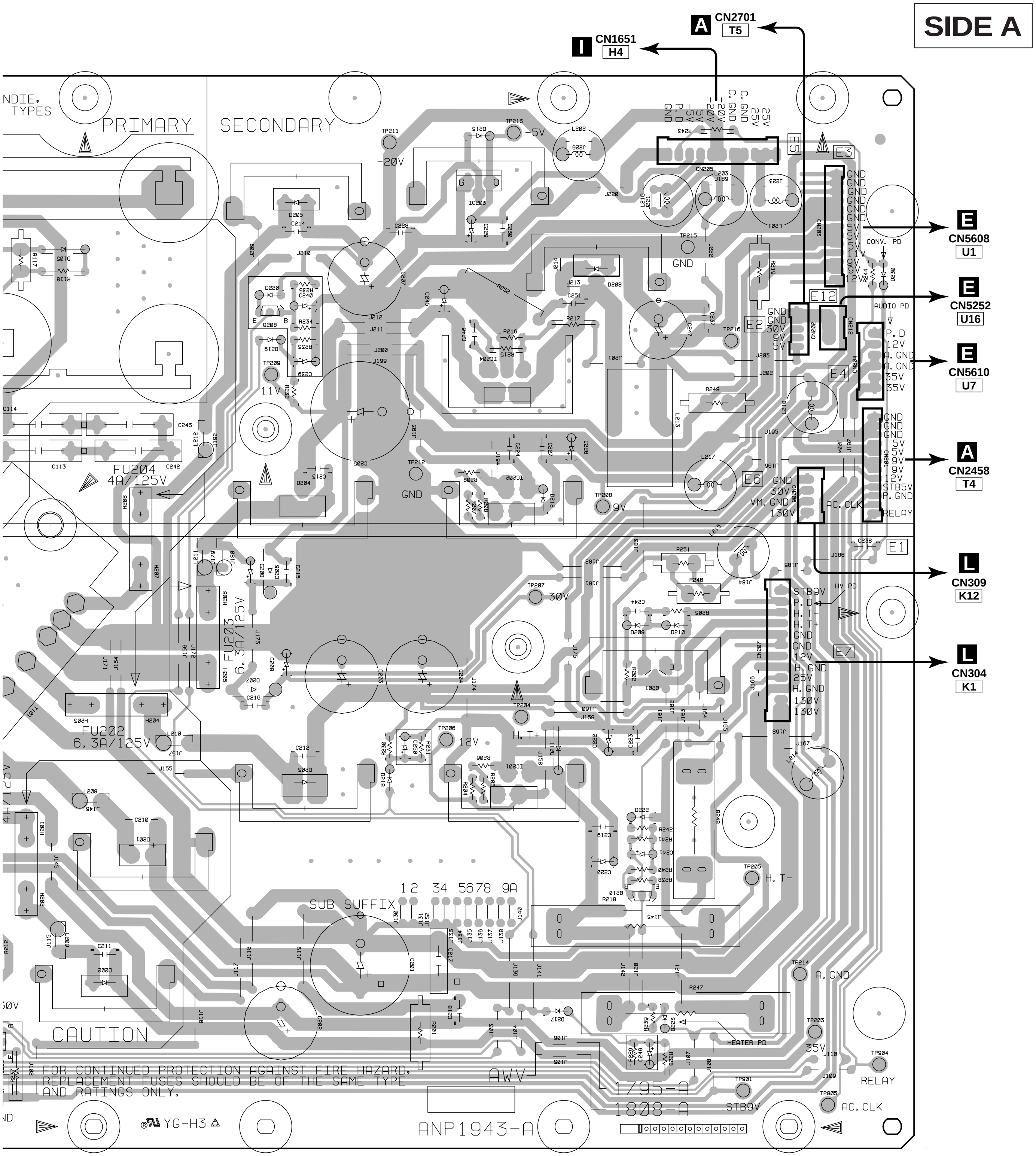
F G S T

4.13 POWER SUPPLY ASSY and POWER SW ASSY


A
B
C
D
P POWER SUPPLY ASSY
LIVE
NEUTRAL
To DIGITAL TUNER SH-D09
ATTENTION
POUR LES PRECAUTIONS CONTINUELLES CONTRE L'INCENDIE, LES FUSIBLES A REMPLACER DOIVENT ETRE LES MEMES TYPES ET VALEURS NOMINALS UNIQUEMENT.
AC IN
CN101
E10
TO DTV STB
CN103
E8
FU101 10A/250V
NEUTRAL
LIVE
MARKING
FU201 4A/125V
FU202 6.3A/
INRUSH RELAY PD
E11
CN102
TO MAIN SW
CN901
POWER DOWN
OVER CURRENT PD
GND
130V ADJ.
130V
STB5V ADJ.
STB5V
P. GND
PRIMARY
SECONDARY
CAUTI
FOR CONTIN
REPLACEMEN
AND RATIN
VR901
VR201
Q101
IC101
IC103
IC102
Q902–Q905
IC903
Q907
Q906
Q206
Q202
Q205
IC901
Q207
Q209
Q901
Q POWER SW ASSY
PW SW ASS'Y AWZ6467
PRIMARY
YG-H2
Z1
CN5001
S5001
(ANP1945–A)

P-a

SIDE A


A CN2701 T5
I CN1651 H4
E CN5608 U1
E CN5252 U16
E CN5610 U7
A CN2458 T4
L CN309 K12
L CN304 K1
PRIMARY
SECONDARY
25V
25V
C.GND
C.GND
-20V
-20V
-5V
-5V
P.D
GND
GND
30V
9V
5V
AUDIO PD
P.D
12V
A.GND
A.GND
35V
35V
CONV. PD
GND
5V
9V
12V
STB5V
P.GND
RELAY
GND
30V
VM.GND
130V
AC.CLK
STB9V
HV PD
H.T
H.GND
130V
FU204 4A/125V
FU203 6.3A/125V
FU202 6.3A/125V
11V
12V
H.T+
H.T-
A.GND
HEATER PD
35V
RELAY
STB9V
AC.CLK
SUB SUFFIX
12 34 5678 9A
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
AWV
1795-A
1808-A
YG-H3
ANP1943-A

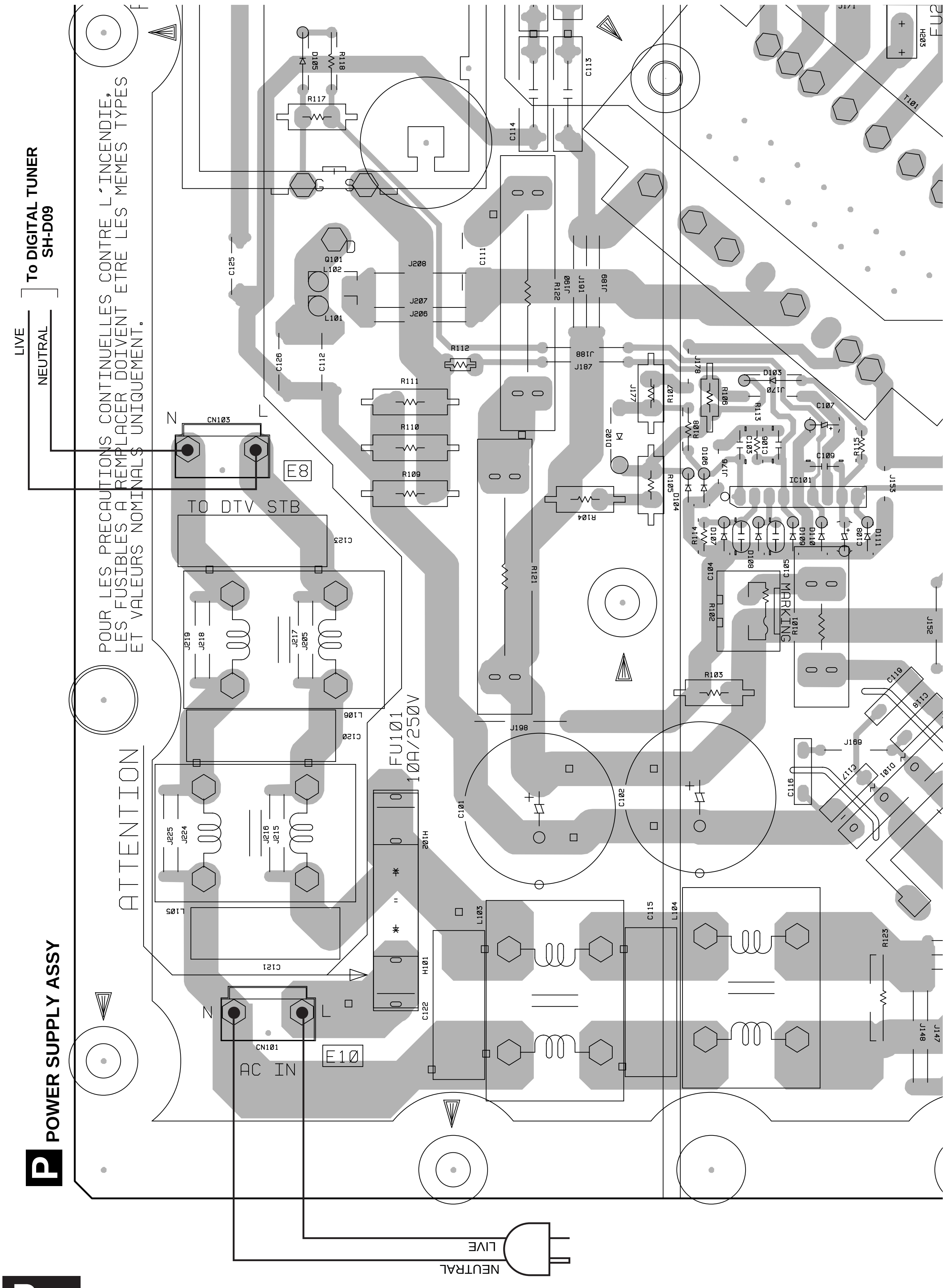
(ANP1943–A)

IC203
Q208
IC204
IC202
Q201
IC201
Q210
209

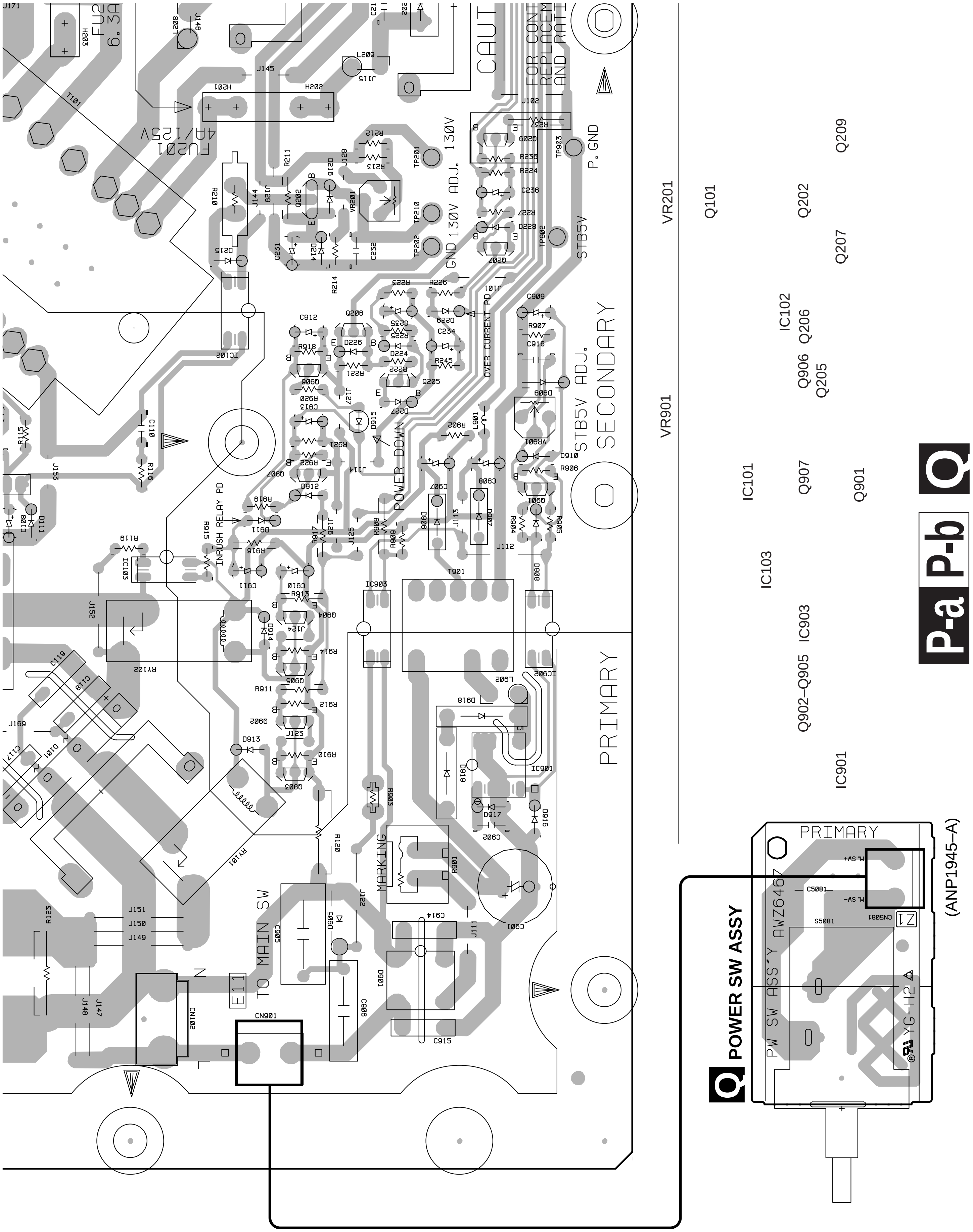
SIDE A

P-a P-b

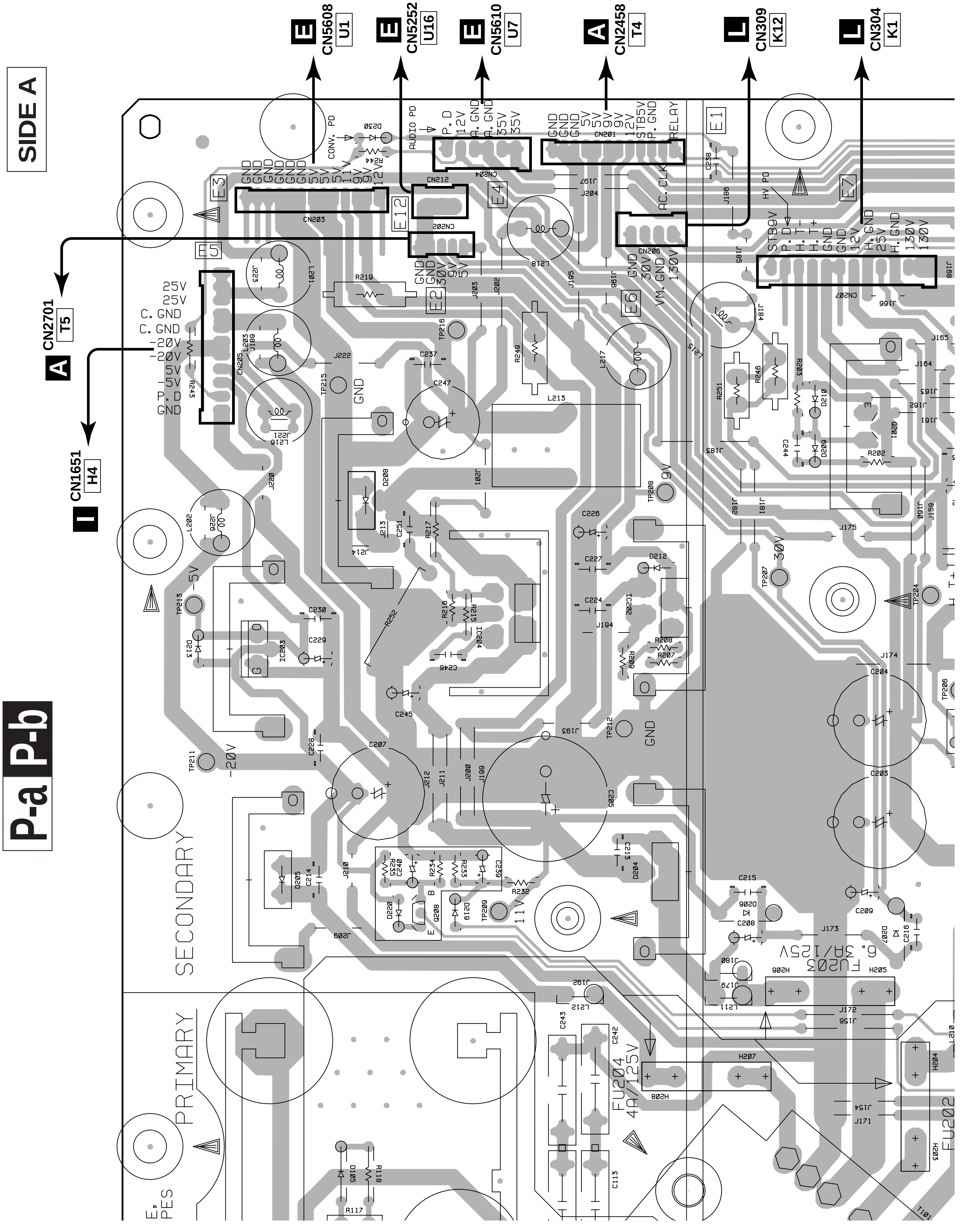
P POWER SUPPLY ASSY

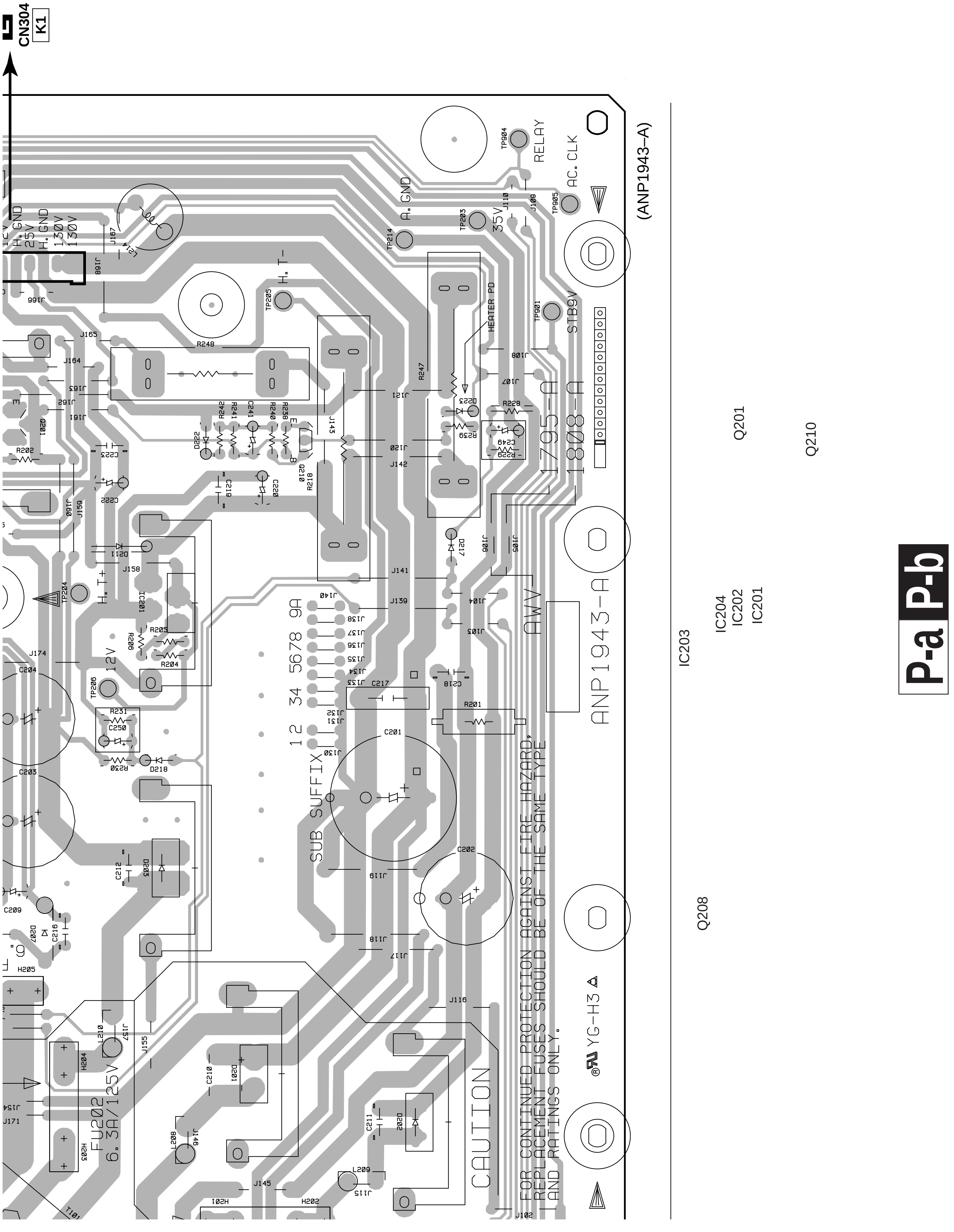


To DIGITAL TUNER
SH-D09
LIVE
NEUTRAL
N
L
CN103
E8
TO DTV STB
POUR LES PRECAUTIONS CONTINUELLES CONTRE L'INCENDIE,
LES FUSIBLES A REMPLACER DOIVENT ETRE LES MEMES TYPES
ET VALEURS NOMINALS UNIQUEMENT.
ATTENTION
FU101
10A/250V
CN101
AC IN
E10
LIVE
NEUTRAL
MARKING
R117
R118
D105
Q101
L102
L101
C125
C126
C112
J208
J207
J206
R112
R111
R110
R109
C111
C113
C114
R122
J190
J191
J189
J188
J187
J177
R107
J178
R106
R113
D103
J170
C107
R108
C103
C106
D106
J176
C109
R115
D102
R105
D104
R104
IC101
J153
R114
D107
D108
D109
D110
C108
D111
C104
C105
R102
R101
J152
R121
R103
J198
J169
C119
C118
C117
D101
C116
C101
C102
C123
J219
J218
J217
J205
L106
C120
J225
J224
J216
J215
L105
C121
H102
H101
C122
L103
C115
L104
R123
J147
J148
T101
J171
H203

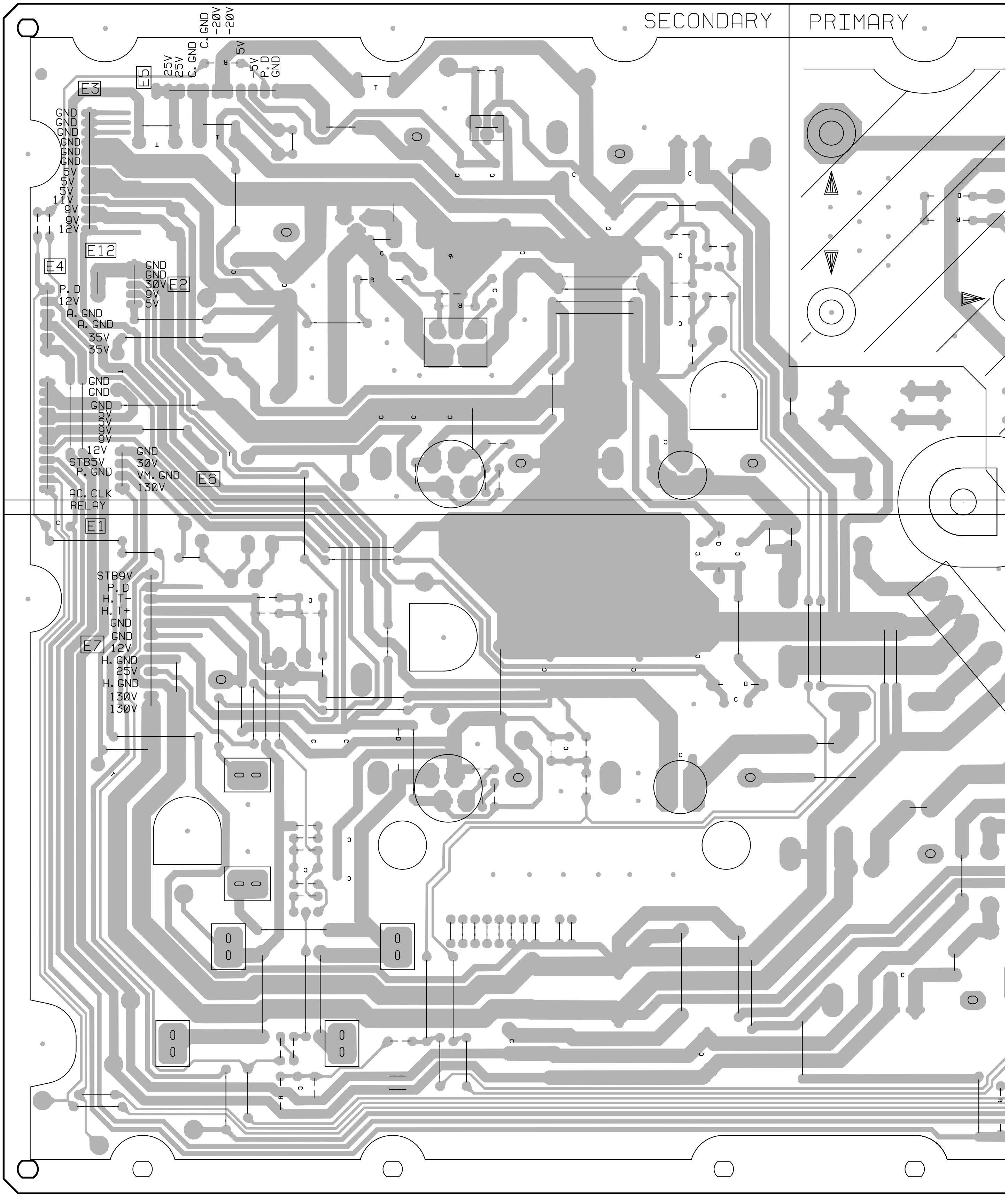

VR201
Q101
Q202
Q209
Q207
IC102
Q206
Q906
Q205
VR901
IC101
Q907
Q901
IC103
IC903
Q902–Q905
IC901
P-a
P-b
Q
PRIMARY
SECONDARY
STB5V
STB5V ADJ.
GND 130V ADJ. 130V
P.GND
OVER CURRENT PD
POWER DOWN
INRUSH RELAY PD
TO MAIN SW
MARKING
CAUTION
FOR CONTINUED PROTECTION
REPLACEMENT
AND RATING
4A/125V
FU201
CN901
CN102
T901
RY101
RY102
T101
E11
POWER SW ASSY
PW SW ASS'Y AWZ6467
(ANP1945–A)
CN5081
S5081
C5081
M.SW+
M.SW-
YG-H2

PRO-610HD, PRO-510HD, SD-582HD5, SD-532HD5

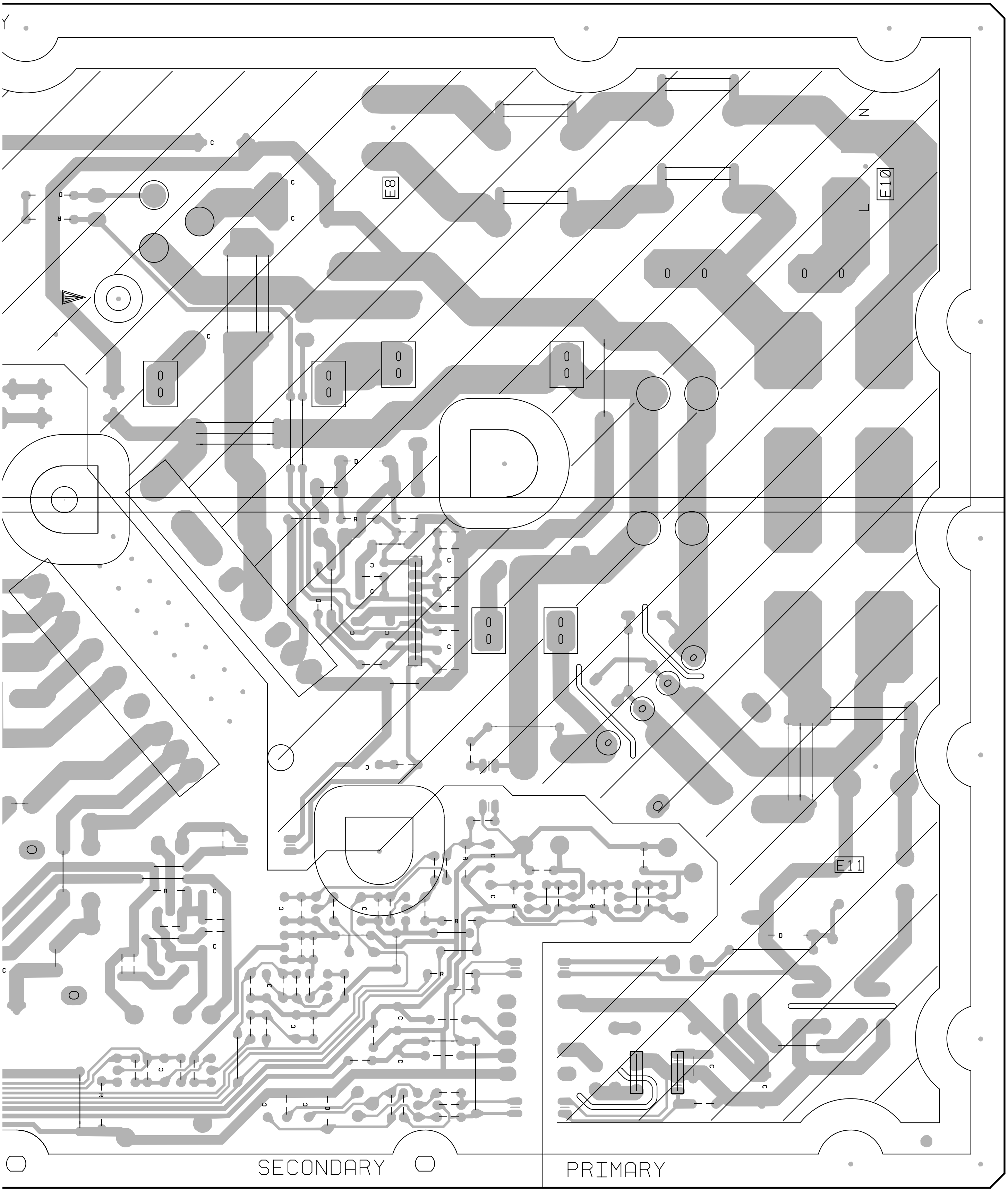

SIDE A
E CN5608 U1
E CN5252 U16
E CN5610 U7
A CN2458 T4
L CN309 K12
L CN304 K1
A CN2701 T5
I CN1651 H4
P-a P-b
A
B
C
D
GND GND GND GND GND GND 5V 5V 5V 11V 9V 9V 12V
CONV. PD
AUDIO PD
P. D 12V A. GND A. GND 35V 35V
GND GND GND 5V 5V 9V 9V 12V STB5V P. GND RELAY
AC. CLK
E1 E3 E4 E5 E6 E7 E12 E2
CN203 CN212 CN204 CN201 CN202 CN206 CN207 CN205
GND GND 30V 9V 5V
GND 30V VM. GND 130V
STB9V P. D. H. T- H. T+ GND GND 12V H. GND 25V H. GND 130V 130V
HV PD
25V 25V C. GND C. GND -20V -20V 5V -5V P. D GND
-5V
-20V
9V
30V
11V
GND
SECONDARY
PRIMARY
FU204 4A/125V
FU203 6.3A/125V
FU202
IC203 IC204 IC202
C247 C207 C205 C204 C203
T101


CN304
K1
(ANP1943–A)
A. GND
AC. CLK
RELAY
TP904
TP905
TP203
35V
J110
J109
TP214
H. GND
25V
H. GND
130V
130V
J167
J168
J166
TP205
H. T-
HEATER PD
TP901
STB9V
J165
R248
J164
J163
J162
J161
R247
J121
J108
J107
R228
D223
R239
C249
R229
R242
R241
C241
R240
R238
D222
J143
J120
J142
Q201
Q210
R202
C223
C222
J160
J159
C219
C220
D210
R218
1795-A
1808-A
D211
J158
D217
J106
J105
TP204
H. T+
IC201
J141
J140
J139
J104
R205
R206
R204
J138
J137
J136
J135
J134
J133
J103
AWV
J174
C204
12V
TP206
C217
C218
R201
ANP1943-A
R231
C250
J132
J131
J130
1 2 3 4 5 6 7 8 9A
SUB SUFFIX
R230
D218
C201
IC204
IC202
IC201
IC203
C203
C212
D203
C202
J119
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE
AND RATINGS ONLY.
C209
D207
C216
J118
J117
Q208
H205
J116
YG-H3
CAUTION
L210
J157
J155
H204
C210
D201
J154
J171
FU202
6.3A/125V
H203
L208
J148
C211
D202
L209
J115
J145
H201
H202
J102
T101
P-a
P-b

P POWER SUPPLY ASSY


A
B
C
D
SECONDARY
PRIMARY
C.GND
-20V
-20V
25V
25V
C.GND
5V
-5V
P.D
GND
E5
E3
GND
GND
GND
GND
GND
GND
5V
5V
5V
11V
9V
9V
12V
E12
E4
GND
GND
30V
E2
9V
5V
P.D
12V
A.GND
A.GND
35V
35V
GND
GND
GND
5V
5V
9V
9V
12V
STB5V
P.GND
GND
30V
VM.GND
130V
E6
AC.CLK
RELAY
E1
STB9V
P.D
H.T-
H.T+
GND
GND
E7
12V
H.GND
25V
H.GND
130V
130V

SIDE B


A
B
C
D
E8
E10
E11
SECONDARY
PRIMARY

(ANP1943–A)

5. PCB PARTS LIST

NOTES :

- *Parts marked by " NSP " are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

  Ex. 1 *When there are 2 effective digits (any digit apart from 0) , such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%) .*

  560 Ω → 56 × 10^1 → 561 .... RD1/4PU $\boxed{5}\boxed{6}\boxed{1}$ *J*
  47k Ω → 47 × 10^3 → 473 .... RD1/4PU $\boxed{4}\boxed{7}\boxed{3}$ *J*
  0.5 Ω → R50 .... RN2H $\boxed{R}\boxed{5}\boxed{0}$ *K*
  1 Ω → 1R0 .... RS1P $\boxed{1}\boxed{R}\boxed{0}$ *K*

  Ex. 2 *When there are 3 effective digits (such as in high precision metal film resistors) .*

  5.62k Ω → 562 × 10^1 → 5621 .... RN1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ *F*

- *Parts marked by ☆ are important parts which relate in X-rays radiation. If any of these parts need to be replaced, always replace with specified parts.*
- *Parts marked by × are important parts which relate in X-rays radiation. If a failure occurs in any of these parts, replace the printed circuit board ASSY where the relevant part has already been adjusted as a working component. Do not replace the actual part itself. If any part marked by × is replaced, there is danger of being exposed to X-rays.*

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.				Remarks
		PRO-610HD	PRO-510HD	SD-582HD5	SD-532HD5	
	POWER SUPPLY ASSY	AWV1795	AWV1795	AWV1808	AWV1808	
☆	DEFLECTION SERVICE ASSY	AWV1809	AWV1809	AWV1809	AWV1809	
	AMP ASSY	AWV1797	AWV1797	AWV1797	AWV1797	
	├── CONV. AMP ASSY	AWZ6456	AWZ6456	AWZ6456	AWZ6456	
	├── R CRT DRIVE ASSY	AWZ6457	AWZ6457	AWZ6457	AWZ6457	
	├── G CRT DRIVE ASSY	AWZ6458	AWZ6458	AWZ6458	AWZ6458	
	└── B CRT DRIVE ASSY	AWZ6459	AWZ6459	AWZ6459	AWZ6459	
NSP	DIGITAL CONV. ASSY	AWV1798	AWV1798	AWV1803	AWV1803	
	├── DIGITAL CONV. ASSY	AWZ6460	AWZ6460	AWZ6460	AWZ6460	
	├── CONNECTOR ASSY	AWZ6461	AWZ6461	AWZ6461	AWZ6461	
	├── FRONT CONTROL ASSY	AWZ6462	AWZ6462	AWZ6462	AWZ6462	
	├── LED DPO ASSY	AWZ6463	AWZ6463	AWZ6470	AWZ6470	
	├── BNC ASSY	AWZ6464	AWZ6464	Not used	Not used	
	├── SR ASSY	AWZ6465	AWZ6465	AWZ6465	AWZ6465	
	├── FRONT INPUT ASSY	AWZ6466	AWZ6466	AWZ6471	AWZ6471	
	├── POWER SW ASSY	AWZ6467	AWZ6467	AWZ6467	AWZ6467	
	├── RGB SW ASSY	AWZ6468	AWZ6468	AWZ6468	AWZ6468	
	└── AUDIO ASSY	AWZ6472	AWZ6472	AWZ6469	AWZ6469	
	VIDEO ASSY	AWV1799	AWV1799	AWV1804	AWV1804	
	SIGNAL ASSY	AWV1800	AWV1800	AWV1805	AWV1805	
	├── RF SWITCH	AXF1088	AXF1088	AXF1088	AXF1088	
	└── TV FRONT END SYSTEM UNIT	AXF1084	AXF1084	AXF1084	AXF1084	
	SUB VIDEO SERVICE ASSY	AWV1819	AWV1819	Not used	Not used	
	SUB VIDEO ASSY	Not used	Not used	AWV1806	AWV1806	
	AV I/O ASSY	AWV1802	AWV1802	AWV1807	AWV1807	

CONTRAST OF PCB ASSEMBLIES

P POWER SUPPLY ASSY

AWV1795 and AWV1808 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWV1795	**AWV1808**	
	L105, L106	ATF1183	Not used	
	C120	ACE1125	Not used	
	CN103	AKM1156	Not used	

T LED DPO ASSY

AWZ6463 and AWZ6470 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWZ6463	**AWZ6470**	
	D5006	NSPWF50S-8038	Not used	
	Q5004	2SC2712	Not used	
	R5064, R5065	RS1/16S223J	Not used	
	R5066	RS1/10S151J	Not used	
	R5077	RS1/16S0R0J	Not used	
	R5078	Not used	RS1/16S0R0J	

R FRONT INPUT ASSY

AWZ6466 and AWZ6471 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWZ6466	**AWZ6471**	
	R5082	RS1/16S0R0J	Not used	
	R5083	Not used	RS1/16S0R0J	
	CN5042 Pin Jack (3P)	AKB1261	AKB1284	

A SIGNAL ASSY

AWV1800 and AWV1805 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWV1800	**AWV1805**	
	A 3/9			
	R2520	Not used	RS1/16S473J	
	R2521, R2638	RS1/16S473J	Not used	
	R2586–R2588, R2595, R2596, R2688	RS1/16S0R0J	Not used	
	R2689	Not used	RS1/16S0R0J	
	CN2452	KM250MA7L	Not used	

E VIDEO ASSY

AWV1799 and AWV1804 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWV1799	AWV1804	
	E 2/2			
	R5268	RD1/4PU133J	RD1/4PU123J	

G AUDIO ASSY

AWZ6472 and AWZ6469 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		AWZ6472	AWZ6469	
	IC1203	NJM4558MD	Not used	
	C1212	CEV470M16	Not used	
	C1213	CKSRYF103Z50	Not used	
	C1214, C1215, C1237, C1246, C1247	CEV220M16	Not used	
	C1249, C1255	CKSRYB682K50	CKSRYB562K50	
	R1208, R1209	RS1/16S101J	Not used	
	R1210, R1250	RS1/16S333J	Not used	
	R1211, R1214	RS1/16S222J	Not used	
	R1212, R1248	RS1/16S823J	Not used	
	R1213, R1215	RS1/16S623J	Not used	
	R1255, R1271	RS1/16S183J	RS1/16S223J	
	R1259	RS1/16S821J	Not used	
	R1264, R1280	RS1/16S103J	RS1/16S123J	
	R1294	RS1/16S0R0J	Not used	
	R1295	Not used	RS1/16S0R0J	

PCB PARTS LIST

For SD-582HD5 and SD-532HD5

H SUB VIDEO ASSY (AWV1806)

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC3001		AN5344FBP
	IC4301		AN5395FBP
	IC3402		CD74HCT4046AM
	IC4304		CXA1315M
	IC4802		HG62G010R29FB
	IC3407		M51952BML
	IC4052		M52036SP
	IC3404		MC14011BF
	IC3003		NJM319M
	IC2204		PD0264AM
	IC2201		PD5563
	IC2203		PST9146N
	IC3405, IC3406		SAA4955TJ
	IC3403		SAA4977H
	IC3401		SAA4990H
	IC3409		TA78M05F
	IC4806		TA8667F
	IC2205		TC74HC157AF
	IC4803		TC74HC4040AF
	IC4051		TC74HC4053AF
	IC4053, IC4055		TC74HC4066AF
	IC3414, IC4054, IC4056		TC74HC4538AF
	IC4804		TC74HCT74AF
	IC3408		TC7SET04FU
	IC3002		TK15420M
	IC3412, IC3413		UPC29L33T
	IC3410		UPC78L05T
	Q3401		2SA1037K
	Q2202, Q2204, Q2205, Q2207, Q2208		2SA1162
	Q3002, Q3003, Q3016, Q3018, Q3204		2SA1162

Mark	No.	Description	Part No.
	Q4057, Q4058, Q4062–Q4064		2SA1162
	Q4071, Q4072, Q4078, Q4081, Q4087		2SA1162
	Q4089–Q4091, Q4096, Q4301, Q4302		2SA1162
	Q4306, Q4307, Q4319, Q4328, Q4330		2SA1162
	Q2201, Q2203, Q2206, Q2209, Q2210		2SC2712
	Q3001, Q3008–Q3013, Q3015, Q3017		2SC2712
	Q3201, Q3206, Q3210, Q3211		2SC2712
	Q3215–Q3227, Q3402, Q3403		2SC2712
	Q4051–Q4056, Q4059–Q4061		2SC2712
	Q4065–Q4070, Q4075–Q4077		2SC2712
	Q4079, Q4080, Q4083–Q4086, Q4088		2SC2712
	Q4092–Q4095, Q4097, Q4098, Q4102		2SC2712
	Q4303–Q4305, Q4308–Q4311		2SC2712
	Q4321–Q4323, Q4325–Q4327		2SC2712
	Q4331, Q4332, Q4807–Q4817		2SC2712
	Q4082		2SK209
	D3001		1SS184
	D2203, D2206, D2207, D2210–D2212		1SS226
	D2215–D2234, D4056, D4057		1SS226
	D4059, D4060		1SS226
	D3402–D3411, D4052–D4054, D4058		1SS352
	D4802–D4805		1SS352
	D3401		1SV232
	D2204, D2205		RD6.8MB

COILS AND FILTERS

Mark	No.	Description	Part No.
	L2203, L4802		ATC1037
	F2201, F3201, F3202, F3402, F3403		ATF1189
	F4302, F4801–F4804		ATF1189
	F3404		ATG1061
	DL3001		ATN1040
	DL4303		ATN1055
	L4310, L4312, L4313		LCTA1R5J3225
	L3201, L3207, L3209		LCTA4R7J3225
	L2201, L3001, L4302, L4311		LCTA5R6J3225
	L4301		LCTA820J3225
	L3206		LCTAR56J3225
	L3402–L3425		QTL1013

CAPACITORS

Mark	No.	Description	Part No.
	C3019, C3220		CCSQCH100D50
	C3403, C3404, C4082, C4365–C4367		CCSQCH101J50
	C2211, C3401		CCSQCH120J50
	C2207, C2208		CCSQCH150J50
	C3407, C3410, C3468, C3469		CCSQCH151J50
	C4376		CCSQCH180J50
	C2205, C2241, C4823, C4828		CCSQCH221J50
	C4369		CCSQCH270J50
	C3257		CCSQCH330J50
	C3402		CCSQCH331J50
	C2210, C3202, C3203, C3228, C3229		CCSQCH390J50
	C3233, C3234		CCSQCH390J50
	C4310		CCSQCH470J50
	C3201, C3227, C3232		CCSQCH4R0C50
	C4302, C4347		CCSQCH560J50
	C2206, C3408, C4062, C4064		CCSQCH561J50
	C3409		CCSQCH680J50
	C3026, C3031, C4067, C4101, C4315		CEV100M16

Mark	No.	Description	Part No.
	C3435, C4348–C4350		CEV101M16
	C2222, C2226, C2237, C2239, C3020		CEV101M6R3
	C3030, C4804, C4817		CEV101M6R3
	C2234, C3014, C4099, C4377		CEV1R0M50
	C3221, C3231, C3237–C3239		CEV220M16
	C4052, C4053		CEV220M16
	C3009, C3017		CEV2R2M50
	C3005, C3006, C3023, C3028		CEV470M10
	C3255, C3256, C4051, C4054		CEV470M10
	C4056, C4057, C4059, C4068, C4078		CEV470M10
	C4080, C4345		CEV470M10
	C4065, C4092, C4093, C4802, C4832		CEV470M16
	C3204, C3207, C3414, C3416, C3418		CEV470M6R3
	C3420, C3422, C3424, C3429, C3433		CEV470M6R3
	C3458, C3461, C3463, C3464, C4075		CEV470M6R3
	C4089		CEV470M6R3
	C3406, C4081, C4094–C4097		CEV4R7M35
	C3024		CEVNP2R2M35
	C3007, C3008		CEVNPR33M50
	C4063		CEVR10M50
	C3001, C3002		CEVR33M50
	C2238, C3015		CEVR47M50
	C3012, C4303, C4311, C4319, C4359		CFHSQ103J16
	C4104		CFHSQ331J50
	C4103		CFHSQ332J16
	C4087, C4102		CFHSQ821J50
	C3471, C3472, C4055, C4355–C4358		CKSQYB224K16
	C4829		CKSQYB224K16
	C4060, C4086		CKSQYB472K50
	C4098		CKSQYB561K50
	C4830		CKSQYB822K50
	C4084		CKSQYF104Z50
	C3010, C3011, C4831, C4835		CKSQYF105Z16
	C2224, C2228, C3022, C4323, C4324		CKSRYB102K50
	C4822		CKSRYB102K50
	C2223, C3013, C3016, C3438		CKSRYF103Z50
	C4304–C4309, C4312, C4314, C4316		CKSRYF103Z50
	C4320, C4322, C4343, C4370, C4827		CKSRYF103Z50
	C2209, C2220, C2221, C2225, C2227		CKSRYF104Z16
	C2236, C3003, C3004, C3018, C3025		CKSRYF104Z16
	C3027, C3029, C3208, C3209		CKSRYF104Z16
	C3242–C3247, C3405, C3411–C3413		CKSRYF104Z16
	C3415, C3417, C3419, C3421, C3423		CKSRYF104Z16
	C3425–C3428, C3430–C3432, C3434		CKSRYF104Z16
	C3436, C3437, C3439–C3457, C3460		CKSRYF104Z16
	C3462, C3465, C3466, C3473, C4058		CKSRYF104Z16
	C4061, C4066, C4069, C4074, C4077		CKSRYF104Z16
	C4079, C4083, C4088, C4091, C4317		CKSRYF104Z16
	C4321, C4340, C4344, C4346, C4801		CKSRYF104Z16
	C4803, C4810, C4816, C4818, C4819		CKSRYF104Z16
	C4821, C4833, C4834, C4836, C4837		CKSRYF104Z16

RESISTORS

Mark	No.	Description	Part No.
	R2269, R2275		DCN1092
	R4193		RS1/16S1001F
	R4219		RS1/16S2001F
	R4871		RS1/16S3302F
	R4175, R4870		RS1/16S6802F

Mark	No.	Description	Part No.
	R3430		RS2LMF8R2J
	R3433		RS3LMF120J
	VR3003 (1 kΩ)		ACP1089
	VR4052 (2.2 kΩ)		ACP1090
	VR3004 (4.7 kΩ)		ACP1091
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN3002	PLUG 50–P	AKM1126
	CN3001	PLUG 44–P	AKM1155
	K3001–K3003, K3204–K3209		AKX9002
	K3401–K3415, K4301–K4304		AKX9002
	X2202	CERAMIC RESONATOR	ASS1015
	CN2202	PLUG 6–P	KM250MA6L

B AV I/O ASSY (AWV1807)

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC6001		CXA2069Q
	Q6012, Q6022, Q6024, Q6025, Q6034		2SA1162
	Q6036–Q6038, Q6201, Q6216–Q6218		2SA1162
	Q6001, Q6002, Q6005–Q6007		2SC2712
	Q6010, Q6011, Q6021, Q6023		2SC2712
	Q6027–Q6033, Q6035, Q6039–Q6048		2SC2712
	Q6202–Q6204		2SC2712
	D6040		1SS184
	D6001–D6022, D6024, D6028, D6029		1SS226
	D6032, D6034, D6036, D6209, D6210		1SS226
	D6023, D6030, D6031, D6037–D6039		1SS352
	D6201–D6203, D6213		1SS352
	D6204		RD6.8MB
	D6214		UDZS6.2B

CAPACITORS

Mark	No.	Description	Part No.
	C6006, C6049, C6052, C6068, C6081		CEV100M16
	C6086		CEV100M16
	C6047		CEV101M6R3
	C6074		CEV102M6R3
	C6013, C6014, C6026, C6027		CEV1R0M50
	C6031, C6032, C6036, C6037		CEV1R0M50
	C6041–C6043, C6065, C6066, C6078		CEV1R0M50
	C6015–C6017, C6024, C6028, C6029		CEV220M16
	C6033, C6034, C6051, C6064, C6070		CEV220M16
	C6083, C6088		CEV220M16
	C6001, C6004, C6018, C6020		CEV470M16
	C6059, C6060, C6085, C6214, C6216		CEV470M16
	C6204		CEV470M6R3
	C6007, C6050, C6053, C6069, C6082		CEV4R7M35
	C6087		CEV4R7M35
	C6067, C6077		CEVR47M50
	C6002, C6003, C6011, C6012		CKSQYF105Z16
	C6202		CKSQYF472Z50
	C6075, C6076		CKSRYB332K50
	C6005, C6008, C6021–C6023		CKSRYF103Z50
	C6038–C6040, C6048, C6054–C6058		CKSRYF103Z50
	C6063, C6071, C6084, C6089, C6201		CKSRYF103Z50
	C6203, C6215		CKSRYF103Z50
	C6019, C6025, C6030, C6035		CKSRYF104Z16

RESISTORS

Mark	No.	Description	Part No.
	R6183		RD1/2LMF1R0J
	R6182		RD1/4LMF3R9J
	R6279–R6281, R6297		RS1/16S0R0J
	R6106, R6123, R6126, R6136, R6144		RS1/16S101J
	R6147, R6207, R6213, R6269		RS1/16S101J
	R6271–R6273		RS1/16S101J
	R6040, R6118, R6130, R6143, R6154		RS1/16S102J
	R6163, R6174, R6201, R6205, R6277		RS1/16S102J
	R6005, R6105, R6116, R6120, R6152		RS1/16S103J
	R6156, R6161, R6165, R6172, R6176		RS1/16S103J
	R6202, R6209, R6268, R6270		RS1/16S103J
	R6004, R6006, R6036, R6114, R6127		RS1/16S104J
	R6150, R6159, R6170		RS1/16S104J
	R6054, R6125		RS1/16S152J
	R6104, R6276		RS1/16S153J
	R6137, R6139		RS1/16S183J
	R6011, R6013, R6020–R6026		RS1/16S221J
	R6029–R6033, R6037, R6052, R6053		RS1/16S221J
	R6067, R6074, R6085, R6086, R6115		RS1/16S221J
	R6124, R6138, R6140–R6142, R6145		RS1/16S221J
	R6151, R6160, R6171		RS1/16S221J
	R6009, R6010, R6041, R6075–R6080		RS1/16S222J
	R6112, R6113, R6131, R6146		RS1/16S222J
	R6121, R6122, R6132–R6135		RS1/16S223J
	R6157, R6158, R6166, R6167		RS1/16S223J
	R6177, R6178, R6204, R6206		RS1/16S223J
	R6210–R6212		RS1/16S223J
	R6203		RS1/16S224J
	R6059, R6068, R6208		RS1/16S332J
	R6119, R6155, R6164, R6175		RS1/16S472J
	R6184, R6185, R6274		RS1/16S472J
	R6001, R6002, R6062, R6063		RS1/16S474J
	R6069, R6070, R6179, R6180		RS1/16S474J
	R6102, R6103		RS1/16S560J
	R6039, R6117, R6129, R6153, R6162		RS1/16S562J
	R6173		RS1/16S562J
	R6012, R6014–R6017, R6019		RS1/16S622J
	R6027, R6028, R6081–R6084		RS1/16S622J
	R6110, R6111		RS1/16S622J
	R6038, R6128		RS1/16S682J
	R6055, R6057		RS1/16S683J
	R6018, R6060, R6061, R6064–R6066		RS1/16S750J
	R6071–R6073, R6181, R6186–R6188		RS1/16S750J
	R6215–R6220		RS1/16S750J
	R6148, R6149, R6194		RS1/16S821J
	R6056, R6058		RS1/16S823J
	R6193		RS1/16S911J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN6001	PIN JACK (6P) WITH SIN	AKB1285
	CN6002	PIN JACK (6P) WITH SIN	AKB1286
	CN6203	PIN JACK (6P)	AKB1287
	CN6205	PLUG 50–P	AKM1126
	JA6201, JA6206	JACK	AKN1071
	CN6006	L–PLUG (10P)	KM250MA10L
	CN6202	PLUG 3–P	KM250MA3LB
	CN6204	PLUG 3–P	KM250MA3LR

For PRO-610HD and PRO-510HD

P POWER SUPPLY ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC101		AN8029
	IC204		MC33167TV
	IC901		MIP0253SP
	IC203		NJM79M05FA
	IC102, IC902, IC903		ON3171
	IC103		PC817CD
	IC201, IC202		PQ30RV11 (A)
	Q206, Q207, Q210, Q906		2SA933S
	Q205, Q901–Q905, Q907		2SC1740S
	Q202		2SC2705
	Q201		2SD1276A
⚠	Q101		2SK1544
	D102, D206, D207		10DF2
	D210–D213, D215–D219		1SS254
	D223, D224, D226, D227		1SS254
	D229, D230, D908, D910–D914		1SS254
	D915		BR3371XJ30A
	D101		D15XB60H
	D906, D907		D1NS4
	D201		D3L60
	D905		ERB06–15
	D909		HZS2BLL
	D228		HZS4BLL
	D209		HZS6A1L
	D222		HZS6B1L
	D214		HZS6C2L
	D105, D110		MA723
	D103		MTZJ24
	D104		MTZJ27B
	D111		RD12ESB
	D106–D109		RD5.1ESB
	D901		S1WB (A) 60B
	D208		SF5SC3L
	D204		YG802C06R
	D202, D203, D205		YG911S2R

COILS AND FILTERS

Mark	No.	Description	Part No.
	L103–L106		ATF1183
	L201, L202, L214, L217, L218		ATH–059
	L215, L216		ATH1046
	L213		ATH1102
	L902		ATX1008
	L101, L102		ATX1021
	L901		LAU2R2J

TRANSFORMERS

Mark	No.	Description	Part No.
	T901		ATK1133
	T101		ATK1135

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
	RY101, RY102		ASR1049

CAPACITORS

Mark	No.	Description	Part No.
	C113, C114, C242, C243		ACE1105
	C115, C120–C122		ACE1125
	C906		ACE1138
	C905		ACE1144
	C210 (100 pF)		ACG–032
	C116, C117, C914, C915		ACG–501
	C125 (3300 pF)		ACG1008
	C111, C112, C126 (4700 pF)		ACG1028
	C201		ACH1146
	C101, C102		ACH1148
	C205		ACH1304
	C215, C216		CCCSL101K2H
	C211–C214		CCCSL221K2H
	C209		CEHAT100M2A
	C208, C220, C234, C236, C241		CEHAT100M50
	C912		CEHAT100M50
	C107, C222, C229		CEHAT101M25
	C226		CEHAT102M16
	C108, C231, C909		CEHAT1R0M50
	C110		CEHAT220M50
	C202		CEHAT222M50
	C908		CEHAT331M10
	C245, C907		CEHAT331M16
	C203, C204, C207		CEHAT332M35
	C235, C910, C911, C913		CEHAT470M25
	C901		CEHAT470M2D
	C247		CEHAT472M10
	C218, C246, C902		CFTXA104J50
	C251		CFTXA563J50
	C103		CKCYB561K50
	C217		CKCYE103P2H
	C109, C219, C223, C224		CKCYF103Z50
	C227, C228, C230, C237, C238		CKCYF103Z50
	C244		CKCYF473Z50
	C232, C916		CQMA104J50
	C104		CQMA182J50
	C106		CQMA473J50
	C105		CQMA822J50

RESISTORS

Mark	No.	Description	Part No.
	R102, R901		ACN1128
	R120, R123 (2.2 MΩ)		BCN1022
	R106		RD1/2MMF100J
	R903		RD1/4MUF103J
	R112		RD1/4MUF681J
	R906		RN1/4PC1501F
	R207		RN1/4PC1502F
	R216		RN1/4PC1503F
	R212, R213		RN1/4PC1603F
	R208, R907		RN1/4PC1801F
	R209		RN1/4PC2701F
	R204		RN1/4PC2702F
	R205, R206		RN1/4PC3301F
	R214		RN1/4PC3901F
	R217		RN1/4PC6801F

Mark	No.	Description	Part No.
	R117		RS1MMF151J
	R104, R105		RS1MMF333J
	R103		RS1MMF473J
	R210		RS2MMF223J
	R219, R249		RS2MMF3R3J
	R201		RS2MMF472J
	R246, R251		RS2MMF821J
	R109–R111		RS2MMFR22J
	R252		RS3LMF4R7J
	R121, R122, R218, R247		RT10PZ120K
	R101		RT5PZ1R8K
	R248		RT7PZ120K
	VR201, VR901		VRTHS6VS102
	Other Resistors		RD1/4PU □□□ J

OTHERS

Mark	No.	Description	Part No.
	8008	SCREW	ABZ30P100FMC
	8001	SPACER	AEB1243
⚠	FU101	FUSE (10A)	AEK1069
	CN901	PLUG 2–P	AKM1127
	CN101, CN103	PLUG2–P	AKM1156
	H201–H208		AKR1003
	H101, H102	FUSE HOLDER	AKR1007
	8004	SCREW	BBZ30P080FCU
	8009	SCREW	BBZ30P080FZK
	CN205	PLUG 10–P	KM250MA10
	CN207	PLUG 12–P	KM250MA12
	CN212	PLUG 3–P	KM250MA3
	CN206	PLUG 4–P	KM250MA4
	CN204	PLUG 6–P	KM250MA6
	8000	SCREW	PBZ30P100FMC
	8010	SCREW	PMB30P100FMC
	8003	SCREW	PMZ30P100FZK
⚠	FU201	FUSE (4A)	REK1082
⚠	FU204	FUSE (5A)	REK1083
⚠	FU202, FU203	FUSE (6.3A)	REK1085

L DEFLECTION SERVICE ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC303, IC601		NJM4558DXP
⚠	IC301		TA8638N
	Q315, Q316, Q604, Q605, Q804		2SA1145
	Q806		2SA1145
	Q808		2SA1837
	Q302, Q306, Q311, Q313, Q319		2SA933S
	Q321, Q322, Q326		2SA933S
×	Q607, Q608		2SA933S
	Q751, Q801		2SA933S
	Q301, Q304, Q305, Q307, Q310		2SC1740S
	Q312, Q318, Q320, Q327, Q602		2SC1740S
	Q614, Q752, Q802		2SC1740S
	Q314, Q317, Q603, Q606, Q803		2SC2705
	Q805, Q807		2SC2705
	Q308, Q601		2SC3332
	Q609		2SC3468
⚠	Q753, Q754		2SC4686A
	Q809		2SC4793
⚠	Q612		2SC5043
⚠	Q309		2SC5046
	Q324, Q613		2SC5197
	Q610		2SD1276A
	D302, D304, D601		10DF2
	D305–D314, D322, D603		1SS254
	D608, D609, D611, D614, D615		1SS254
	D621, D625, D751–D757		1SS254
⚠	D622, D623		2NU41
	D321		BR3371XJ30A
⚠	D318		DD52RC
	D328, D329, D343, D610		ERA22–02
	D613		ERB06–15
	D303, D602		ERB93–02L3
⚠	D316, D317		ERD07–15
	D801, D802		MTZJ39
	D315, D327, D604–D607		RD12ESB
	D344, D624		RD5.1ESB1
	D612		RD7.5ESB2
	D627		RD9.1ESB1
	D803–D806		S5688G

COILS AND FILTERS

Mark	No.	Description	Part No.
	SG751		AEX1024
	L307, L308		ATH–059
⚠	T301		ATK1126
⚠	T302, T602		ATK1127
⚠ ×	T601		ATK1136
	L303–L306, L309, L601–L603		ATX1008
	L310, L605		LTA152J

CAPACITORS

Mark	No.	Description	Part No.
⚠	C325 (100 pF)		ACG–032
	C754, C755 (4700 pF)		ACG1028
	C636		ACH–372
⚠	C324, C604 (10 µF/160V)		ACH1117
	C331, C335, C358, C606, C802		CCCSL101J50
	C336, C612		CCCSL101K2H
	C820–C822		CCCSL220J50
	C815		CCCSL221J50
	C326, C342		CCCSL470J50
	C304		CEANP2R2M50
	C806, C807		CEAT101M25
	C817		CEAT470M50
	C334		CEHAQ1R0M2C
	C353, C616		CEHAT100M2D
	C619, C621, C752		CEHAT100M50
	C308, C337, C349, C355, C608		CEHAT101M25
	C330, C605		CEHAT101M50
	C359		CEHAT102M35
	C357, C633		CEHAT1R0M50
	C620, C809, C818		CEHAT220M2D
	C635		CEHAT220M50
	C618		CEHAT220M63
	C328, C624, C625		CEHAT221M25
	C332, C613		CEHAT330M35
	C313		CEHAT331M16

Mark	No.	Description	Part No.
	C810		CEHAT3R3M2C
	C623, C751		CEHAT470M25
	C351, C352, C360, C361		CEHAT471M16
	C634		CEHAT4R7M2E
	C309, C341, C343		CEHAT4R7M50
⚠	C601, C602		CFPHW182H3D
⚠	C320		CFPHW332H3D
⚠	C321		CFPHW472H3D
⚠	C319, C322		CFPMW334J2G
	C323, C603		CFTXA105J50
	C312		CFTXA224J50
	C329		CFTXA683J50
	C311		CKCYB102K50
	C303		CKCYB103K50
	C607		CKCYB222K50
	C628		CKCYB332K2H
	C327, C611		CKCYB561K50
	C627		CKCYB682K50
	C637, C814, C819		CKCYE103P2H
	C615		CKCYE222P2H
	C315–C318, C333, C338–C340		CKCYF103Z50
	C350, C356, C609, C610, C614		CKCYF103Z50
	C617, C622, C626, C629, C753		CKCYF103Z50
	C801, C803, C808		CKCYF103Z50
	C804, C805, C816		CKCYF473Z50
	C813		CQMA104K2E
	C307		CQMA471J50
	C811, C812		CQMA472K2E
	C302		CQMA561J50
	C305		CQMA682J50
	C301		CQPA102J2A
	C314		CQPA333J2A
	C306		CQPA821J2A

RESISTORS

Mark	No.	Description	Part No.
	R769		ACN1011
	R661 (27 Ω)		ACN1136
	R826		RD1/2MMF100J
	R815		RD1/2MMF332J
	R770, R772–R776		RD1/2PM114J
	R631		RD1/2PM122J
	R365		RD1/2PM153J
	R648		RD1/2PM154J
	R771, R777–R781		RD1/2PM184J
	R366, R618, R649		RD1/2PM223J
	R757–R768		RD1/2PM224J
	R813, R814		RD1/2PM270J
	R801		RD1/2PM272J
	R823, R824		RD1/2PM2R2J
	R628		RD1/2PM333J
	R617		RD1/2PM563J
⚠	R395, R634		RD1/4LMF100J
	R635		RD1/4MUF100J
	R827, R828		RD1/4MUF560J
⚠	R629, R630		RN1/2PC3902F
	R328		RN1/4PC1002F
	R646, R650		RN1/4PC1003F
×	R645		RN1/4PC1003F
	R419		RN1/4PC1202F
×	R639		RN1/4PC1202F
	R318		RN1/4PC1203F
	R302		RN1/4PC1303F
	R372		RN1/4PC1503F
	R753		RN1/4PC2202F
	R327		RN1/4PC2702F
	R752		RN1/4PC3302F
	R783		RN1/4PC3601F
	R755		RN1/4PC4701F
	R754		RN1/4PC56R0F
	R373, R421		RN1/4PC6801F
×	R640		RN1/4PC6801F
	R782		RN1/4PC7501F
×	R644		RN1/4PC7502F
	R301, R647		RN1/4PC8201F
	R338, R604		RS1MMF100J
	R809, R810		RS1MMF472J
	R658, R659		RS2MMF101J
	R336, R337, R339, R602, R603		RS2MMF1R0J
	R621, R622		RS2MMF1R8J
	R333, R601		RS2MMF222J
	R819–R821		RS2MMF271J
	R358, R359		RS2MMF2R2J
	R355		RS2MMF390J
	R660		RS2MMFR56J
	R822, R825, R831		RS3LMF471J
⚠	R392		RT5PZ561K
×	VR601		VRTHS6VS102
	VR301		VRTHS6VS222
×	VR602		VRTHS6VS223
	VR603		VRTHS6VS223
	VR302		VRTHS6VS473
×	R637, R638		RD1/4PU102J
×	R642		RD1/4PU821J
×	R643		RD1/4PU822J
	Other Resistors		RD1/4PU □□□ J

OTHERS

Mark	No.	Description	Part No.
	J602	H.V.RETURN WIRE	ADX2486
	J601	1P READ WIRE	ADX2492
	J603	HV CABLE (400)	ADY1043
	301, 309, 601	ISOLATION SHEET	AEB1358
	602	NYLON BINDER	AEC–093
⚠	CN301–CN303	PLUG 3–P	AKM1055
	CN751	PLUG 3–P	AKM1055
	305, 607	SCREW	BBZ30P080FCU
	CN304	PLUG 12–P	KM250MA12
	CN305	PLUG 12–P	KM250MA13
	CN309	PLUG 4–P	KM250MA4
	CN307	PLUG 5–P	KM250MA5
	CN308	PLUG 6–P	KM250MA6
	CN306	PLUG 6–P	KM250MA6R
	CN801	PLUG 9–P	KM250MA9
	304, 605	SCREW	PMB30P160FZK
	306, 604, 606, 752, 802	SCREW	PMZ30P100FZK
	608	SCREW	VPZ40P120FMC

K CONV. AMP ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC1002		CA0007AD
	IC1004, IC1005		M5220P
	IC1003		PA0053B
	IC901, IC903		STK392–110
	IC1001		TC4052BP
	Q902, Q905, Q908, Q909, Q917		2SA933S
	Q914		2SB950A
	Q901, Q903, Q906, Q907		2SC1740S
	Q910–Q912, Q915, Q916		2SC1740S
	Q904, Q918		2SC2878
	Q913		2SD1276A
	D1014, D1015, D907–D911		1SS254
	D921, D922, D924		1SS254
	D923		BR3371XJ30A
	D1001–D1013		RD12ESB
	D901–D906, D915–D920		S5688G

COILS AND FILTERS

Mark	No.	Description	Part No.
	L901, L902		ATH–059
	L903, L904		ATX1008

CAPACITORS

Mark	No.	Description	Part No.
	C1001, C1022, C1023, C1025, C1041		CCCSL101J50
	C909, C911, C912		CCCSL151J50
	C917–C919, C934–C936		CCCSL220J50
	C905		CEANP101M25
	C953		CEAT100M50
	C1013–C1017, C1019, C1029, C1030		CEAT101M10
	C1035		CEAT101M10
	C906		CEAT101M25
	C1039		CEAT220M50
	C1036, C1037		CEAT330M16
	C1038		CEAT470M10
	C1004, C945		CEAT470M25
	C921, C922, C938, C939		CEHAT102M25
	C920, C923, C937		CEHAT102M35
	C952		CEHAT221M25
	C908		CEHAT221M35
	C949		CEHAT332M25
	C948		CEHAT332M35
	C940		CEHAT471M35
	C1040		CFTYA184J50
	C1028, C1034		CFTYA224J50
	C910, C913, C950		CKCYB102K50
	C924–C926, C941–C943		CKCYB331K50
	C914–C916, C931–C933		CKCYB681K50
	C1002, C1003, C1005–C1012, C1018		CKCYF103Z50
	C1020, C1021, C1026, C1027		CKCYF103Z50
	C1031–C1033, C901–C904, C907		CKCYF103Z50
	C927–C930, C944, C946, C947		CKCYF103Z50
	C951, C954–C957		CKCYF103Z50

RESISTORS

Mark	No.	Description	Part No.
	R933, R955		RD1/2MMF470J
	R934, R940–R942, R956		RS1MMF470J
	R922		RS1MMF562J
	R935, R936, R957, R958		RS1MMFR47J
	R927–R929, R978–R980		RS2MMF121J
	R985		RS2MMF1R2J
	R960, R961		RS2MMF1R5J
	R930, R931, R981–R983		RS2MMF221J
	R976, R977		RS2MMF2R2J
	R914, R988		RS2MMFR47J
	R937, R938, R959		RS3LMF1R5J
	R932		RS3LMF221J
	R998		RS3LMFR68J
	R939		RS3LMFR82J
	Other Resistors		RD1/4PU□□□J

OTHERS

Mark	No.	Description	Part No.
	903	SCREW	BBZ30P080FCU
	CN905	PLUG 10–P	KM200IA10
	CN904	16P PLUG	KM200IA16
	CN901	PLUG 6–P	KM250MA6
	CN903	PLUG 6–P	KM250MA6B
	CN902	PLUG 6–P	KM250MA6R
	901	SCREW	PMB30P160FZK
	902	SCREW	PMZ30P100FZK

M R CRT DRIVE ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC5101		TDA6120Q
	Q5101		2SC1740S
	D5101–D5106		S5688G

COILS AND FILTERS

Mark	No.	Description	Part No.
	SG5101, SG5102		AEX1024
	L5102		LAU2R2J
	L5101		LAU3R3J
	L5103		LTA562J

CAPACITORS

Mark	No.	Description	Part No.
	C5108 (1000 pF)		ACG1001
	C5107, C5114 (22 µF/250V)		ACH1318
	C5103		CCCSL120J50
	C5101		CCCSL390J50
	C5102		CCCSL7R0D50
	C5110		CEAT101M25
	C5109		CEAT222M16
	C5111, C5113		CKCYE103P2H
	C5104, C5106		CKCYF103Z50

RESISTORS

Mark	No.	Description	Part No.
	R5115 (47 Ω)		ACN1129
	R5116 (220 Ω)		ACN1131
	R5118 (470 Ω)		ACN1133
	R5117		RD1/2LMF100J
	R5101		RS1MMF6R8J

Mark	No.	Description	Part No.
	R5112–R5114		RS3LMF822J
	VR5101		VRTHS6VS222
	Other Resistors		RD1/4PU □□□ J

OTHERS

Mark	No.	Description	Part No.
	5104	CRT SOCKET	AKG1006
	5107, 5108	SCREW	BBZ30P080FCU
	5103–5106	SCREW	BPZ30P100FZK
	CN5105	PLUG 3–P	KM250MA3
	CN5106	PLUG 3–P	KM250MA3R
	CN5102	PLUG 5–P	KM250MA5B
	CN5101	PLUG 5–P	KM250MA5R
	5101, 5102	SCREW	PMB30P160FZK

N G CRT DRIVE ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC5151		TDA6120Q
	Q5151		2SC1740S
	D5151–D5156		S5688G

COILS AND FILTERS

Mark	No.	Description	Part No.
	SG5151, SG5152		AEX1024
	L5152		LAU2R2J
	L5151		LAU3R3J
	L5153		LTA562J

CAPACITORS

Mark	No.	Description	Part No.
	C5158 (1000 pF)		ACG1001
	C5157, C5164 (22 µF/250V)		ACH1318
	C5153		CCCSL120J50
	C5151		CCCSL560J50
	C5152		CCCSL7R0D50
	C5160		CEAT101M25
	C5159		CEAT222M16
	C5161, C5163		CKCYE103P2H
	C5154, C5156, C5165		CKCYF103Z50

RESISTORS

Mark	No.	Description	Part No.
	R5164 (47 Ω)		ACN1129
	R5165 (220 Ω)		ACN1131
	R5168 (470 Ω)		ACN1133
	R5167		RD1/2LMF100J
	R5151		RS1MMF6R8J
	R5161–R5163		RS3LMF822J
	VR5151		VRTHS6VS222
	Other Resistors		RD1/4PU □□□ J

OTHERS

Mark	No.	Description	Part No.
	J5152	LEAD WITH HOUSING	ADX2493
	5154	CRT SOCKET	AKG1006
	5157, 5158	SCREW	BBZ30P080FCU
	5153–5156	SCREW	BPZ30P100FZK
	CN5156	PLUG 3–P	KM250MA3
	CN5157	PLUG 3–P	KM250MA3B
	CN5151	PLUG 5–P	KM250MA5
	5151, 5152	SCREW	PMB30P160FZK

O B CRT DRIVE ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC5201		TDA6120Q
	Q5201		2SC1740S
	D5201–D5206		S5688G

COILS AND FILTERS

Mark	No.	Description	Part No.
	SG5201, SG5202		AEX1024
	L5202		LAU1R0J
	L5201		LAU4R7J
	L5203		LTA562J

CAPACITORS

Mark	No.	Description	Part No.
	C5208 (1000 pF)		ACG1001
	C5207, C5214 (22 µF/250V)		ACH1318
	C5201–C5203		CCCSL220J50
	C5210		CEAT101M25
	C5209		CEAT222M16
	C5211, C5213		CKCYE103P2H
	C5204, C5206		CKCYF103Z50

RESISTORS

Mark	No.	Description	Part No.
	R5214 (47 Ω)		ACN1129
	R5215 (220 Ω)		ACN1131
	R5218 (470 Ω)		ACN1133
	R5217		RD1/2LMF100J
	R5201		RS1MMF6R8J
	R5211–R5213		RS3LMF822J
	VR5201		VRTHS6VS222
	Other Resistors		RD1/4PU □□□ J

OTHERS

Mark	No.	Description	Part No.
	J5203	LEAD WITH HOUSING	ADX2493
	5204	CRT SOCKET	AKG1006
	5207, 5208	SCREW	BBZ30P080FCU
	5203–5206	SCREW	BPZ30P100FZK
	CN5206	PLUG 3–P	KM250MA3
	CN5207	PLUG 3–P	KM250MA3B
	CN5201	PLUG 5–P	KM250MA5B
	5201, 5202	SCREW	PMB30P160FZK

I DIGITAL CONV. ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC1656		24LC08B (I) P
	IC1410		24LC128 (I) P
	IC1401		CM0006CF
	IC1420		M51952BML
	IC1655		MC14066BF
	IC1411, IC1419		NJM4558MD
	IC1652		PD5564
	IC1653		PST9146N
	IC1409		TC74HC14AF
	IC1654		TC74HC157AF
	IC1421		TC74HC4053AF
	IC1651		TC74HC4538AF
	IC1402		TLC2932IPW

Mark	No.	Description	Part No.
	IC1412–IC1418		UPC4570G2
	IC1403–IC1408		UPD6376GS
	Q1401, Q1651		2SC2712
	Q1403, Q1652		2SJ461
	D1409		1SS181
	D1677		1SS184
	D1401–D1407, D1651, D1654–D1657		1SS226
	D1661–D1665, D1667–D1670		1SS226
	D1673–D1676		1SS226
	D1652, D1666		RD6.8MB

COILS AND FILTERS

Mark	No.	Description	Part No.
	L1651		ATC1037
	F1401–F1403		ATF1189
	L1402		ATH1046
	L1401, L1403, L1405, L1407, L1409 (470 µH)		ATH1097
	L1411, L1413 (470 µH)		ATH1097
	L1415–L1420, L1424, L1425		QTL1013
	L1428, L1429, L1432, L1433		QTL1013
	L1436, L1437		QTL1013

CAPACITORS

Mark	No.	Description	Part No.
	C1401, C1405, C1421, C1425, C1426		CCSQCH100D50
	C1430, C1431, C1435, C1436		CCSQCH100D50
	C1440, C1441, C1445, C1446, C1450		CCSQCH100D50
	C1540, C1542, C1544, C1546		CCSQCH101J50
	C1659, C1660		CCSQCH150J50
	C1434		CCSQCH181J50
	C1671		CCSQCH221J50
	C1451		CCSQCH471J50
	C1539		CCSQSL220J50
	C1551		CEAT102M6R3
	C1655		CEV101M6R3
	C1672		CEV1R0M50
	C1415		CEV2R2M50
	C1406, C1408, C1411, C1413, C1429		CEV470M6R3
	C1458, C1461, C1467, C1470, C1473		CEV470M6R3
	C1475, C1483, C1485, C1497, C1498		CEV470M6R3
	C1500, C1505, C1506, C1508		CEV470M6R3
	C1510, C1511, C1515, C1516, C1518		CEV470M6R3
	C1520, C1521, C1525, C1526, C1530		CEV470M6R3
	C1532, C1535, C1536, C1538, C1541		CEV470M6R3
	C1543, C1545, C1548, C1652, C1661		CEV470M6R3
	C1665, C1669		CEV470M6R3
	C1453		CEVNP4R7M16
	C1456		CEVR22M50
	C1454		CFHSQ103J16
	C1402, C1422, C1427, C1432, C1437		CFHSQ471J50
	C1442, C1447		CFHSQ471J50
	C1403, C1423, C1428, C1433, C1438		CFHSQ472J16
	C1443, C1448		CFHSQ472J16
	C1654, C1673		CFHSQ561J50
	C1452		CFHSQ821J50
	C1680		CKCYF103Z50
	C1658, C1663, C1664		CKSRYB102K50
	C1667		CKSRYB561K50
	C1404, C1407, C1409, C1410, C1412		CKSRYF103Z50
	C1414, C1416–C1418, C1420, C1424		CKSRYF103Z50
	C1455, C1457, C1459, C1460, C1463		CKSRYF103Z50
	C1465, C1466, C1468, C1469		CKSRYF103Z50
	C1471, C1472, C1474, C1476		CKSRYF103Z50
	C1478, C1479, C1481, C1482, C1484		CKSRYF103Z50
	C1486, C1488, C1489, C1491, C1492		CKSRYF103Z50
	C1494, C1496, C1499, C1501, C1502		CKSRYF103Z50
	C1504, C1507, C1509, C1512, C1514		CKSRYF103Z50
	C1517, C1519, C1522, C1524		CKSRYF103Z50
	C1527, C1528, C1534, C1537		CKSRYF103Z50
	C1549, C1550, C1651, C1653		CKSRYF103Z50
	C1656, C1657, C1662, C1666, C1670		CKSRYF103Z50
	C1668		CKSRYF104Z16

RESISTORS

Mark	No.	Description	Part No.
	R1731		RD1/4LMF2R7J
	R1404, R1412, R1416, R1419, R1424		RS1/16S1002F
	R1428, R1431, R1436, R1440		RS1/16S1002F
	R1454–R1456		RS1/16S1002F
	R1520, R1522, R1524, R1526, R1528		RS1/16S2402F
	R1530		RS1/16S2402F
	R1655		RS1/16S3901F
	R1401, R1514–R1518		RS1/16S4302F
	Other Resistors		RS1/16S☐☐☐J

OTHERS

Mark	No.	Description	Part No.
	202, 203	CABLE HOLDER	AKT1011
	X1651	CERAMIC RESONATOR	ASS1015
	CN1655	CONNECTOR	B12B–PH–SM3
	CN1654	CONNECTOR	B8B–PH–SM3
	CN1651	PLUG 10–P	KM250MA10
	CN1652	PLUG 6–P	KM250MA6
	CN1653	PLUG 7–P	KM250MA7

J CONNECTOR ASSY

OTHERS

Mark	No.	Description	Part No.
	1801, 1802	CABLE HOLDER	AKT1011
	J1801, J1802	JUMPER WIRE	D15A13–100–2651
	CN1803	10P SOCKET	KP200IA10L
	CN1804	16P SOCKET	KP200IA16L

S FRONT CONTROL ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
	S5001–S5008		ASG1034

CAPACITORS

Mark	No.	Description	Part No.
	C5003		CEV101M6R3
	C5004, C5005		CKSRYF103Z50

RESISTORS

Mark	No.	Description	Part No.
	R5014		RS1/16S101J
	R5012, R5019		RS1/16S102J
	R5015		RS1/16S181J
	R5018		RS1/16S222J
	R5016		RS1/16S301J

Mark	No.	Description	Part No.
	R5013		RS1/16S470J
	R5017		RS1/16S561J
	R5020		RS1/16S622J

OTHERS

Mark	No.	Description	Part No.
	J5001	7P HOUSING WIRE	ADX2500
	CN5001	PLUG 8–P	KM250MA8

T LED DPO ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	Q5001, Q5005		2SA1162
	Q5002, Q5004		2SC2712
	D5002		1SS181
	D5007		AEL1177
	D5006		NSPWF50S–8038
	D5008		SLR–56PC (LMN)
	PC5001		P1241–09

CAPACITORS

Mark	No.	Description	Part No.
	C5001		CEV100M16
	C5002		CEV330M25

RESISTORS

Mark	No.	Description	Part No.
	R5001		RD1/2LMF820J
	R5072, R5073, R5077		RS1/16S0R0J
	R5011		RS1/16S102J
	R5035, R5036		RS1/16S103J
	R5005		RS1/16S152J
	R5064, R5065		RS1/16S223J
	R5007		RS1/16S273J
	R5010		RS1/16S334J
	R5002, R5003		RS1/16S473J
	R5008		RS1/16S562J
	R5004		RS1/2S821J
	VR5001		VRTS6VS473
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Part No.
	5001	DPO HOLDER	AMR2294

C BNC ASSY

OTHERS

Mark	No.	Description	Part No.
	J5025	3P HOUSING WIRE	ADX2494
	CN5022	CONNECTOR	AKX1002
	5021	SCREW TERMINAL	VNE1949

D SR ASSY

CAPACITORS

Mark	No.	Description	Part No.
	C5072		CCSQCH121J50
	C5071		CEV101M6R3

RESISTORS

Mark	No.	Description	Part No.
	R5080		RS1/16S0R0J
	R5071		RS1/16S102J

OTHERS

Mark	No.	Description	Part No.
	CN5071	PLUG 3–P	KM250MA3B
		REMOTE RECEIVER UNIT	GP1U28X

R FRONT INPUT ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	Q5041, Q5042		2SC2712
	D5041, D5042		RD15MB

CAPACITORS

Mark	No.	Description	Part No.
	C5043, C5044		CEV1R0M50
	C5041		CEV470M16
	C5042, C5045		CKSRYF103Z50

RESISTORS

Mark	No.	Description	Part No.
	R5043		RD1/4LMF101J
	R5082		RS1/16S0R0J
	R5054, R5055		RS1/16S222J
	R5046, R5049–R5051		RS1/16S473J
	R5047, R5048		RS1/16S474J
	R5041, R5044, R5045		RS1/16S750J
	Other Resistors		RS1/10S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN5042	PIN JACK (3P) WITH SIN	AKB1261
	CN5041	PLUG 12–P	KM250MA13

Q POWER SW ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
	S5081		ASG1084

OTHERS

Mark	No.	Description	Part No.
	CN5081	PLUG 2–P	AKM1127

F RGB SW ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
	S5091		ASH1029

RESISTORS

Mark	No.	Description	Part No.
	R5096		RS1/16S101J
	R5091–R5095		RS1/16S750J

OTHERS

Mark	No.	Description	Part No.
	CN5092	15PD–SUB SOCKET	AKP1195
	CN5091	8P PLUG	KM250NA8L

G AUDIO ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC1202		LA4280–P
	IC1203–IC1205		NJM4558MD
	IC1201		UPC1853CT–01
	Q1206		2SA1162
	Q1201–Q1203, Q1207, Q1210–Q1213		2SC2712
	Q1208, Q1209		2SC4213
	D1205		1SS226

CAPACITORS

Mark	No.	Description	Part No.
	C1239 (470 µF/10V)		ACH1334
	C1242, C1243		CCSQCH151J50
	C1245		CEHAT102M50
	C1228, C1229		CEHV2R2M50
	C1204		CEV1R0M50
	C1205, C1214, C1215, C1237		CEV220M16
	C1246, C1247		CEV220M16
	C1234		CEV221M35
	C1202, C1203		CEV2R2M50
	C1235, C1236		CEV330M25
	C1206, C1207		CEV3R3M50
	C1208, C1212, C1263, C1267		CEV470M16
	C1240, C1241		CEVR47M50
	C1218, C1221		CFHS223J16
	C1210, C1211, C1244		CFHSP104J16
	C1201		CFHSP823J16
	C1219		CFHSQ102J50
	C1217		CFHSQ222J50
	C1223		CFHSQ681J50
	C1220, C1222		CFHSQ682J16
	C1216, C1230, C1231, C1233		CFTYA104J50
	C1250, C1256		CKSQYB183K50
	C1264, C1265		CKSRYB102K50
	C1248, C1254		CKSRYB152K50
	C1251, C1257		CKSRYB332K50
	C1249, C1255		CKSRYB682K50
	C1209, C1213, C1226, C1227, C1232		CKSRYF103Z50
	C1262, C1266		CKSRYF103Z50

RESISTORS

Mark	No.	Description	Part No.
	R1245		RS1/2S561J
	R1228, R1229		RD1/4LMF2R2J
	R1291		RD1/4LMF3R9J
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	1201	ISOLATION SHEET	AEB1359
	1202	PLATE SPRING	ANG1569
	1201	SCREW	BBZ30P080FCU
	CN1201	11P SOCKET	KP200IA11L
	CN1202	12P SOCKET	KP200IA12L

E VIDEO ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC5254		CXA1315P
	IC5602		PQ30RV11 (A)
	IC5601		PQ3RF23
	IC5251		TA1276AN
	IC5256		TC74HC4053AP
	IC5252		TC74HC4538AP
	Q5251–Q5255, Q5260–Q5264, Q5266		2SA933S
	Q5268, Q5270, Q5276, Q5277		2SA933S
	Q5285–Q5287, Q5290, Q5301		2SA933S
	Q5305, Q5306, Q5318, Q5323		2SA933S
	Q5331–Q5333, Q5341, Q5601, Q5602		2SA933S
	Q5606–Q5608, Q5611, Q5621, Q5622		2SA933S
	Q5257, Q5259, Q5265, Q5272–Q5275		2SC1740S
	Q5278–Q5281, Q5288, Q5289, Q5302		2SC1740S
	Q5307–Q5310, Q5319, Q5320		2SC1740S
	Q5328–Q5330, Q5340, Q5342		2SC1740S
	Q5603–Q5605, Q5609		2SC1740S
	Q5613–Q5620		2SC1740S
	Q5267, Q5269, Q5271		2SC2235
	D5251–D5283, D5293–D5297		1SS254
	D5308–D5310, D5314–D5319		1SS254
	D5329–D5338, D5340–D5347		1SS254
	D5349–D5362, D5601		1SS254
	D5603–D5605, D5608–D5620		1SS254
	D5298–D5306, D5320–D5328		MTZJ11
	D5284–D5292		S5688G

COILS AND FILTERS

Mark	No.	Description	Part No.
	L5601–L5603, L5605		ATH–059
	L5251		LAU100J
	L5253		LAU1R0J
	L5252		LAU4R7J

CAPACITORS

Mark	No.	Description	Part No.
	C5259		CCCCH271J50
	C5298, C5299		CCCCH7R0D50
	C5332, C5629–C5631		CCCSL150J50
	C5296		CCCSL151J50
	C5322, C5334		CCCSL180J50
	C5288		CCCSL220J50
	C5295		CCCSL2R0C50
	C5605		CCCSL330J50
	C5287		CCCSL560J50
	C5269, C5281, C5282, C5297, C5321		CEAT100M50
	C5336, C5619		CEAT100M50
	C5251, C5255, C5312, C5324, C5340		CEAT101M10
	C5601, C5602, C5622		CEAT101M10
	C5309, C5604		CEAT101M16
	C5610, C5612		CEAT102M16
	C5616, C5617		CEAT102M25
	C5274, C5284		CEAT1R0M50
	C5301, C5331		CEAT220M50
	C5270		CEAT221M10
	C5319		CEAT221M16
	C5607, C5608, C5623		CEAT222M10
	C5272, C5283		CEAT2R2M50

Mark	No.	Description	Part No.
	C5292		CEAT470M16
	C5613		CEAT471M16
	C5261		CEAT471M6R3
	C5285		CEAT4R7M50
	C5257, C5258, C5271, C5273		CEATR10M50
	C5286		CEATR47M50
	C5252–C5254, C5256, C5262, C5278		CKCYF103Z50
	C5293, C5294, C5310, C5311		CKCYF103Z50
	C5316–C5318, C5325, C5339, C5341		CKCYF103Z50
	C5603, C5624–C5628		CKCYF103Z50
	C5263–C5268, C5275–C5277		CQMA104J50
	C5323		CQPA103J2A
	C5300		CQPA223J2A
	C5260		CQPA271J2A

RESISTORS

Mark	No.	Description	Part No.
	R5326, R5331, R5336		RD1/2PM100J
	R5285–R5287		RD1/2PM101J
	R5656, R5657		RD1/2PM152J
	R5323, R5328, R5333		RD1/2PM821J
	R5317, R5319, R5321		RD1/2PM8R2J
	R5309		RN1/4PC1002F
	R5310		RN1/4PC1102F
	R5346, R5587		RN1/4PC1201F
	R5297		RN1/4PC1202F
	R5586		RN1/4PC1300F
	R5303		RN1/4PC1501F
	R5345, R5644		RN1/4PC1502F
	R5711		RN1/4PC1801F
	R5353		RN1/4PC2002F
	R5298		RN1/4PC2201F
	R5307		RN1/4PC2700F
	R5344, R5643		RN1/4PC2701F
	R5295, R5296, R5304, R5347		RN1/4PC3301F
	R5469, R5470		RN1/4PC3301F
	R5349, R5354		RN1/4PC3302F
	R5311		RN1/4PC4702F
	R5343		RN1/4PC5101F
	R5306, R5308		RN1/4PC5601F
	R5302, R5305		RN1/4PC7500F
	R5294, R5300		RN1/4PC8200F
	R5348		RN1/4PC9102F
	R5645, R5646		RS2MMF1R0J
	R5663, R5712		RS3LMFR22J
	VR5251, VR5252 (22 kΩ)		ACP1072
	Other Resistors		RD1/4PU □□□ J

OTHERS

Mark	No.	Description	Part No.
	CN5601, CN5603, CN5604	SOCKET 50–P	AKP1161
	CN5602, CN5605	SOCKET 44–P	AKP1186
	KN5601–KN5604	GROUND PLATE	ANK–142
	CN5607	11P PLUG	KM200IA11
	CN5609	12P PLUG	KM200IA12
	CN5255	PLUG 11–P	KM250MA11
	CN5251	PLUG 15–P	KM250MA15
	CN5252	PLUG 3–P	KM250MA3
	CN5611	PLUG 4–P	KM250MA4
	CN5610	PLUG 6–P	KM250MA6

Mark	No.	Description	Part No.
	CN5606	8P SOCKET	KP250NA8
	5602, 5604	SCREW	PMZ30P100FZK

A SIGNAL ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC2452		M38869FFAHP
	IC2454		24LC32A (I) P
	IC7703		CM0010AF
	IC6305		CXA1315M
	IC2701		CXA2094Q
	IC7002		HY514264BJC–50A
	IC7704		KIA431F
	IC7702		LC32V4265JL–25S
	IC7003		MB40C568HPFV
	IC2451, IC2702		MC14066BF
	IC7501		ML6420CS–3
	IC7006		ML6428CS–1
	IC7301, IC7304		MM1031XM
	IC7103, IC7303, IC7305, IC7306		NJM2233BM
	IC7503		NJM2283M
	IC2703, IC2801, IC7004, IC7308, IC7701		PQ20VZ1U
	IC2453		PST9146N
	IC7101, IC7300		TA1270AF
	IC6301–IC6304		TC74HC4053AF
	IC7505		TC74HC4066AF
	IC7504		TC74HC4538AF
	IC7307		TC90A45F
	IC7102, IC7302, IC7502		TK15420M
	IC7001		UPD64081BGF–3BA
	Q2452, Q2454, Q2701, Q2706, Q2713		2SA1162
	Q2715, Q2804, Q2805, Q6301		2SA1162
	Q6303, Q6304, Q6306, Q6308, Q6310		2SA1162
	Q6313–Q6322, Q6324, Q6325, Q6361		2SA1162
	Q6363, Q7002, Q7003, Q7005, Q7006		2SA1162
	Q7009, Q7108, Q7118–Q7124, Q7311		2SA1162
	Q7316, Q7318, Q7319, Q7323–Q7325		2SA1162
	Q7528		2SA1162
	Q2453, Q2455–Q2457, Q2459–Q2464		2SC2712
	Q2702–Q2705, Q2707, Q2708, Q2711		2SC2712
	Q2714, Q2801–Q2803, Q2806		2SC2712
	Q2808–Q2810, Q6328–Q6360, Q6362		2SC2712
	Q7001, Q7004, Q7007, Q7008		2SC2712
	Q7010, Q7011, Q7013–Q7015		2SC2712
	Q7101–Q7105, Q7107, Q7111		2SC2712
	Q7113–Q7117, Q7125, Q7128		2SC2712
	Q7300, Q7301, Q7303, Q7304, Q7309		2SC2712
	Q7312–Q7315, Q7317, Q7320		2SC2712
	Q7501, Q7502, Q7505, Q7507–Q7527		2SC2712
	Q7529, Q7530		2SC2712
	Q2451, Q6302, Q6305, Q6307, Q6309		2SC4213
	Q6311, Q6312, Q6323, Q6326, Q6327		2SC4213
	Q7307, Q7308, Q7310		2SC4213
	Q2458		2SJ461
	Q7012		2SK209
	D2454, D2455, D2490		1SS184
	D2456, D2457, D2460–D2469		1SS226

Mark	No.	Description	Part No.
	D2475–D2484, D2486, D2488		1SS226
	D2703–D2707, D2801, D2802, D2805		1SS226
	D6301–D6309, D6316–D6320		1SS226
	D2451–D2453, D2458, D2459, D2485		1SS352
	D2489, D6310, D6313, D7001, D7504		1SS352
	D7300, D7301, D7501–D7503		RD10MB
	D2487		RD6.8MB
	D2709, D2804		UDZ33B

COILS AND FILTERS

Mark	No.	Description	Part No.
	L2457		ATF–163
	F7001, F7002, F7004, F7701–F7704		ATF1189
	DL7101		ATN1054
	L2451, L2452		ATX1035
	L7008, L7011, L7102, L7504		LCTA100J3225
	L7302		LCTA101J3225
	L7103, L7306		LCTA120J3225
	L7101		LCTA121J3225
	L7009, L7012		LCTA150J3225
	L6302, L7010, L7106, L7303–L7305		LCTA220J3225
	L7505		LCTA220J3225
	L2701–L2705, L2801–L2804		LCTA2R2J3225
	L7104		LCTA3R9J3225
	L7001		LCTA4R7J3225
	L7105, L7107, L7300, L7307, L7506		LCTA5R6J3225
	L7002, L7003, L7005–L7007		QTL1013
	L7705, L7706		QTL1013

CAPACITORS

Mark	No.	Description	Part No.
	C7114, C7317 (0.47 μF/16V)		ACE1130
	C7140, C7340, C7361, C7363		CCSQCH120J50
	C7051, C7062, C7136, C7138, C7554		CCSQCH121J50
	C7060		CCSQCH150J50
	C7355, C7357		CCSQCH181J50
	C7362, C7364		CCSQCH270J50
	C7139		CCSQCH331J50
	C2727, C2811, C6373, C6374		CCSQCH470J50
	C7014		CCSQCH471J50
	C7137		CCSQCH680J50
	C7365, C7370		CCSQCJ3R0C50
	C7102, C7301		CCSQSL222J50
	C7008		CCSQSL391J50
	C7057, C7063		CCSRCH100D50
	C2732, C2822, C7033, C7520, C7521		CCSRCH101J50
	C7523, C7524, C7526, C7527, C7553		CCSRCH101J50
	C7555, C7556		CCSRCH101J50
	C7002, C7003		CCSRCH180J50
	C7047, C7050, C7146, C7550		CCSRCH220J50
	C7059, C7145, C7356, C7372, C7532		CCSRCH330J50
	C7535, C7551, C7552		CCSRCH330J50
	C7058, C7064		CCSRCH560J50
	C7512		CCSRCH680J50
	C2478		CEAT222M10
	C2479		CEAT222M16
	C2702, C2703, C2725, C2729, C2737		CEV100M16
	C2740, C2741, C2747, C2802–C2804		CEV100M16
	C2815, C6325, C6348, C7010		CEV100M16
	C7125, C7126, C7329, C7330		CEV100M16
	C7344–C7347, C7504–C7506		CEV100M16

Mark	No.	Description	Part No.
	C7508, C7509, C7522, C7525, C7559		CEV100M16
	C7725–C7730, C7760		CEV100M16
	C2738, C2746, C2818, C2821		CEV100M50
	C2454, C2462, C2467, C2473, C7027		CEV101M6R3
	C7029, C7039, C7515, C7704–C7706		CEV101M6R3
	C7755		CEV101M6R3
	C7105		CEV102M6R3
	C2705, C2709, C7052, C7054, C7055		CEV1R0M50
	C7341, C7343, C7358		CEV1R0M50
	C2476, C6301–C6306, C6308–C6310		CEV220M16
	C6312–C6317, C6322–C6324		CEV220M16
	C6368–C6370, C7133–C7135		CEV220M16
	C7337–C7339		CEV220M16
	C2735, C2814, C7034, C7036, C7038		CEV221M10
	C7511		CEV221M10
	C7103, C7104, C7302, C7303		CEV2R2M50
	C2453, C2717, C6320, C6332, C6339		CEV470M16
	C6355, C6357, C6363–C6365, C7053		CEV470M16
	C7128, C7130, C7141, C7143, C7332		CEV470M16
	C7335, C7336, C7529		CEV470M16
	C2455, C7025, C7061, C7147, C7304		CEV470M6R3
	C7342, C7349, C7351, C7501, C7510		CEV470M6R3
	C7518, C7519, C7546, C7548, C7716		CEV470M6R3
	C7723, C7732, C7734		CEV470M6R3
	C2720, C2721, C2723, C2801, C2808		CEV471M10
	C2810		CEV471M10
	C2451, C2452, C2701, C2706, C2707		CEV4R7M35
	C2714–C2716, C2718, C2750, C2751		CEV4R7M35
	C6326, C6349		CEV4R7M35
	C7101, C7300		CEVR22M50
	C2708		CFHS123J16
	C7107, C7307		CFHS223J16
	C2712		CFHS473J16
	C7106, C7108–C7113, C7306		CFHSP104J16
	C7311–C7316		CFHSP104J16
	C2713		CFHSQ272J50
	C2711		CKSQYB562K50
	C2719, C2722, C2724, C2726		CKSQYF103Z50
	C2730, C2731, C2734, C2736, C2739		CKSQYF103Z50
	C2745, C2805, C2806, C2809		CKSQYF103Z50
	C2816, C2817, C2819, C7348, C7350		CKSQYF103Z50
	C7352–C7354, C7359, C7360		CKSQYF103Z50
	C7366–C7369, C7371		CKSQYF103Z50
	C7745–C7753, C7761–C7763, C7769		CKSQYF105Z16
	C7772		CKSQYF105Z16
	C7754		CKSQYF224Z25
	C2459, C2464, C2728, C2748, C2807		CKSRYB102K50
	C2812		CKSRYB102K50
	C2457, C2458, C2460, C2463, C2465		CKSRYB103K50
	C6307, C6311, C6318, C6321		CKSRYB103K50
	C6328–C6331, C6333, C6335–C6338		CKSRYB103K50
	C6340, C6342–C6347, C6351–C6353		CKSRYB103K50
	C6356, C6358–C6362, C6366, C6367		CKSRYB103K50
	C7012, C7148, C7305, C7766		CKSRYB103K50
	C7756, C7758		CKSRYB152K50
	C7765		CKSRYB683K16
	C2456, C2461, C2468–C2472, C2474		CKSRYF104Z16

Mark	No.	Description	Part No.
	C2477, C2480, C7001, C7004–C7007		CKSRYF104Z16
	C7009, C7011, C7013, C7015–C7024		CKSRYF104Z16
	C7026, C7028, C7030–C7032, C7035		CKSRYF104Z16
	C7037, C7041, C7046, C7048, C7049		CKSRYF104Z16
	C7056, C7116, C7117, C7120, C7124		CKSRYF104Z16
	C7127, C7129, C7142, C7144, C7323		CKSRYF104Z16
	C7327, C7331, C7333, C7502, C7503		CKSRYF104Z16
	C7507, C7514, C7528, C7545, C7547		CKSRYF104Z16
	C7557, C7558, C7701–C7703		CKSRYF104Z16
	C7707–C7715, C7717–C7722, C7724		CKSRYF104Z16
	C7731, C7733, C7735–C7744		CKSRYF104Z16
	C7767, C7768, C7770, C7771		CKSRYF104Z16
	C7764		CKSRYF473Z50
	C2710		CSZS3R3K20
	C2704		CSZSC100K25

RESISTORS

	R7710–R7713 (22 kΩ ×4)		ACN7073
	R2475, R2481–R2485, R2487 (100 Ω ×4)		DCN1092
	R2498, R2499, R7714–R7720 (100 Ω ×4)		DCN1092
	R2763, R2830		RD1/2LMF271J
	R2764, R2837		RS1/16S1001F
	R7730		RS1/16S1002F
	R7029, R7424, R7701		RS1/16S1101F
	R7729		RS1/16S1502F
	R7030, R7046, R7702		RS1/16S1801F
	R7047		RS1/16S2701F
	R7423		RS1/16S3301F
	R2771, R2834		RS1/16S6201F
	VR2701, VR2801 (470 Ω)		ACP1088
	Other Resistors		RS1/16S☐☐☐J

OTHERS

	2704, 2705	PULG CORD	ADE1171
	J2703	10P HOUSING WIRE	ADX2496
	J2451	3P HOUSING WIRE	ADX2499
	J2701	3P HOUSING WIRE	ADX2567
	CN2454	PLUG 50–P	AKM1126
	CN7501	PLUG 44–P	AKM1155
	K7503–K7506, K7509–K7514, K7706		AKX9002
	K7709–K7712		AKX9002
	X2451	CERAMIC RESONATOR	ASS1015
	X7102, X7301	CERAMIC RESONATOR	ASS1019
	X7101, X7300	(3.58 MHz)	ASS1138
	X7001 (20 MHz)		ASS1143
	CN2457	L–PLUG (8P)	KM250MA8L
	CN2451	L–PLUG (8P)	KM250MA8LR
	CN2458	PH CONNECTER (SMT)	S12B–PH–SM3
	CN2455	CONNECTOR	S3B–PH–SM3
	CN2701	CONNECTOR	S5B–PH–SM3
	CN2453	CONNECTOR	S8B–PH–SM3

RF SWITCH

RF SWITCH has no service part.

Mark	No.	Description	Part No.

TV FRONT END SYSTEM UNIT

TV FRONT END SYSTEM UNIT has no service part.

H SUB VIDEO SERVICE ASSY

SEMICONDUCTORS

	IC4001		AD8057ART
	IC3001		AN5344FBP
	IC4301		AN5395FBP
	IC4304		CXA1315M
	IC3201		CXA3106Q
	IC3203		CXD2303AQ
	IC3601, IC3604		EM636327Q–8
	IC4802		HG62G010R29FB
	IC4052		M52036SP
	IC3602		MB40958PFQ
	IC3003		NJM319M
	IC2204		PD0264AM
	IC3801		PD3420A8
	IC2201		PD5563
	IC3401		PE5066A
	IC3501		PE5067A
	IC2203		PST9146N
	IC3206		TA78M05F
	IC4806		TA8667F
	IC2205		TC74HC157AF
	IC4803		TC74HC4040AF
	IC4051		TC74HC4053AF
	IC4053, IC4055		TC74HC4066AF
	IC4054, IC4056		TC74HC4538AF
	IC4804		TC74HCT74AF
	IC3204		TC74LCX541FT
	IC3502, IC3503		TC7SET04FU
	IC3209, IC3802		TC7SET08FU
	IC3002		TK15420M
	Q2202, Q2204, Q2205, Q2207, Q2208		2SA1162
	Q3002, Q3003, Q3016, Q3018		2SA1162
	Q3604–Q3606, Q4003, Q4005		2SA1162
	Q4057, Q4058, Q4062–Q4064		2SA1162
	Q4071, Q4072, Q4078, Q4081, Q4087		2SA1162
	Q4089–Q4091, Q4096, Q4301, Q4302		2SA1162
	Q4306, Q4307, Q4319, Q4328, Q4330		2SA1162
	Q4001, Q4007		2SA1669
	Q2201, Q2203, Q2206, Q2209, Q2210		2SC2712
	Q3001, Q3008–Q3013, Q3015, Q3017		2SC2712
	Q3201–Q3213, Q3601–Q3603, Q4002		2SC2712
	Q4004, Q4006, Q4008, Q4051–Q4056		2SC2712
	Q4059–Q4061, Q4065–Q4070		2SC2712
	Q4075–Q4077, Q4079, Q4080		2SC2712
	Q4083–Q4086, Q4088, Q4092–Q4095		2SC2712
	Q4097, Q4098, Q4102, Q4303–Q4305		2SC2712
	Q4308–Q4311, Q4321–Q4323		2SC2712
	Q4325–Q4327, Q4331, Q4332		2SC2712
	Q4807–Q4817		2SC2712
	Q4082		2SK209
	D3001		1SS184

Mark	No. Description	Part No.
	D2203, D2206, D2207, D2210–D2212	1SS226
	D2215–D2234, D4056, D4057	1SS226
	D4059, D4060	1SS226
	D3201, D4052–D4054, D4058	1SS352
	D4802–D4805	1SS352
	D2204, D2205	RD6.8MB

COILS AND FILTERS

Mark	No. Description	Part No.
	L2203, L4802	ATC1037
	F2201, F3202, F3203, F3401, F3801	ATF1189
	F4302, F4801–F4804	ATF1189
	DL3001	ATN1040
	DL4303	ATN1055
	L3601, L3603, L3605	LCTA1R2J3225
	L4310, L4312	LCTA1R5J3225
	L3602, L3604, L3606	LCTA2R2J3225
	L3202, L3205, L3207	LCTA4R7J3225
	L2201, L3001, L3201, L3203, L3204	LCTA5R6J3225
	L3206, L4302, L4311	LCTA5R6J3225
	L4301	LCTA820J3225

CAPACITORS

Mark	No. Description	Part No.
	C3205, C3207 (0.47 µF/16V)	ACE1130
	C3019, C3265, C3654	CCSQCH100D50
	C3204, C3264, C3645–C3647, C4082	CCSQCH101J50
	C4365–C4367	CCSQCH101J50
	C2211	CCSQCH120J50
	C2207, C2208	CCSQCH150J50
	C3655, C3656	CCSQCH180J50
	C2205, C2241, C4823, C4828	CCSQCH221J50
	C4369	CCSQCH270J50
	C3243, C3247, C3266, C3269	CCSQCH330J50
	C3245, C3267, C3270	CCSQCH331J50
	C2210	CCSQCH390J50
	C3246, C3268, C3271, C4310	CCSQCH470J50
	C3620, C3648, C3649, C4302, C4347	CCSQCH560J50
	C2206, C4062, C4064	CCSQCH561J50
	C3202	CCSQSL222J50
	C3416, C3520, C3616, C3618, C3619	CCSRCH220J50
	C3817	CCSRCH220J50
	C3814, C3815	CCSRCH7R0D50
	C3026, C3031, C3219, C3239, C4067	CEV100M16
	C4101, C4315	CEV100M16
	C4348–C4350	CEV101M16
	C2222, C2226, C2237, C2239, C3020	CEV101M6R3
	C3030, C3401, C3501, C3506	CEV101M6R3
	C3801, C3802, C4804, C4817	CEV101M6R3
	C2234, C3014, C3640, C4099, C4377	CEV1R0M50
	C4052, C4053	CEV220M16
	C3009, C3017	CEV2R2M50
	C3005, C3006, C3023, C3028	CEV470M10
	C4004, C4005, C4051, C4054	CEV470M10
	C4056, C4057, C4059, C4068, C4078	CEV470M10
	C4080, C4345	CEV470M10
	C4002, C4003, C4065, C4092, C4093	CEV470M16
	C4802, C4832	CEV470M16
	C3208, C3209, C3220, C3224, C3233	CEV470M6R3

Mark	No. Description	Part No.
	C3241, C3244, C3250–C3252, C3254	CEV470M6R3
	C3256, C3601, C3602, C3617	CEV470M6R3
	C3623, C3624, C3643, C3644, C4075	CEV470M6R3
	C4089	CEV470M6R3
	C4081, C4094–C4097	CEV4R7M35
	C3024	CEVNP2R2M35
	C3007, C3008	CEVNPR33M50
	C4063	CEVR10M50
	C3001, C3002	CEVR33M50
	C2238, C3015	CEVR47M50
	C3012, C4303, C4311, C4319, C4359	CFHSQ103J16
	C4104	CFHSQ331J50
	C4103	CFHSQ332J16
	C4087, C4102	CFHSQ821J50
	C4055, C4355–C4358, C4829	CKSQYB224K16
	C4060, C4086	CKSQYB472K50
	C4098	CKSQYB561K50
	C4830	CKSQYB822K50
	C4084	CKSQYF104Z50
	C3010, C3011, C4831, C4835	CKSQYF105Z16
	C2224, C2228, C3022, C4323, C4324	CKSRYB102K50
	C4822	CKSRYB102K50
	C2223, C3013, C3016, C3210–C3215	CKSRYF103Z50
	C3641, C4304–C4309, C4312, C4314	CKSRYF103Z50
	C4316, C4320, C4322, C4343, C4370	CKSRYF103Z50
	C4827	CKSRYF103Z50
	C2209, C2220, C2221, C2225, C2227	CKSRYF104Z16
	C2236, C3003, C3004, C3018, C3025	CKSRYF104Z16
	C3027, C3029, C3201, C3216–C3218	CKSRYF104Z16
	C3221–C3223, C3225–C3232, C3234	CKSRYF104Z16
	C3238, C3240, C3242, C3248, C3249	CKSRYF104Z16
	C3255, C3257, C3263, C3276	CKSRYF104Z16
	C3403–C3415, C3502–C3505	CKSRYF104Z16
	C3507–C3519, C3603–C3615	CKSRYF104Z16
	C3621, C3622, C3625–C3639, C3642	CKSRYF104Z16
	C3803–C3805, C3816, C3818, C4001	CKSRYF104Z16
	C4058, C4061, C4066, C4069, C4074	CKSRYF104Z16
	C4077, C4079, C4083, C4088, C4091	CKSRYF104Z16
	C4317, C4321, C4340, C4344, C4346	CKSRYF104Z16
	C4801, C4803, C4810, C4816	CKSRYF104Z16
	C4818, C4819, C4821, C4833, C4834	CKSRYF104Z16
	C4836, C4837	CKSRYF104Z16
	C3206, C3261	CKSRYF223Z50

RESISTORS

Mark	No. Description	Part No.
	R3521, R3522, R3801, R3808	DCN1090
	R3819–R3821, R3826, R3831	DCN1090
	R2269, R2275	DCN1092
	R3809, R3810	DCN1100
	R3291, R4022, R4193	RS1/16S1001F
	R4008, R4012	RS1/16S1202F
	R3207, R3290	RS1/16S1601F
	R4004, R4010, R4219	RS1/16S2001F
	R4002, R4021	RS1/16S2002F
	R4009	RS1/16S3001F
	R3206	RS1/16S3301F
	R4871	RS1/16S3302F

Mark	No.	Description	Part No.
	R4175, R4870		RS1/16S6802F
	R3261		RS3LMF330J
	VR3003 (1 kΩ)		ACP1089
	VR4052 (2.2 kΩ)		ACP1090
	VR3004 (4.7 kΩ)		ACP1091
	Other Resistors		RS1/16S □□□ J

OTHERS

Mark	No.	Description	Part No.
	CN3002	PLUG 50–P	AKM1126
	CN3001	PLUG 44–P	AKM1155
	K3001–K3003, K3201, K3202		AKX9002
	K3501–K3514, K3801–K3826		AKX9002
	K4301–K4304		AKX9002
	X2202	CERAMIC RESONATOR	ASS1015
	X3801 (20.0 MHz)		ASS1147
	CN2202	PLUG 6–P	KM250MA6L

B AV I/O ASSY (AWV1802)

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC6001		CXA2069Q
	IC6201, IC6202		MC14066BF
	Q6004, Q6012, Q6014, Q6015, Q6019		2SA1162
	Q6022, Q6024, Q6025, Q6034		2SA1162
	Q6036–Q6038, Q6201, Q6206, Q6212		2SA1162
	Q6214, Q6216–Q6218		2SA1162
	Q6001–Q6003, Q6005–Q6011, Q6013		2SC2712
	Q6016–Q6018, Q6020, Q6021, Q6023		2SC2712
	Q6027–Q6033, Q6035, Q6039–Q6048		2SC2712
	Q6202–Q6205, Q6207–Q6211, Q6213		2SC2712
	Q6215		2SC2712
	D6040, D6041, D6207		1SS184
	D6001–D6022, D6024, D6027–D6029		1SS226
	D6032, D6034, D6036, D6208–D6212		1SS226
	D6023, D6030, D6031, D6037–D6039		1SS352
	D6201–D6203, D6213		1SS352
	D6204		RD6.8MB
	D6214		UDZS6.2B

CAPACITORS

Mark	No.	Description	Part No.
	C6006, C6049, C6052, C6068, C6081		CEV100M16
	C6086		CEV100M16
	C6047		CEV101M6R3
	C6073, C6074		CEV102M6R3
	C6013, C6014, C6026, C6027		CEV1R0M50
	C6031, C6032, C6036, C6037		CEV1R0M50
	C6041–C6043, C6065, C6066, C6078		CEV1R0M50
	C6209		CEV1R0M50
	C6015–C6017, C6024, C6028, C6029		CEV220M16
	C6033, C6034, C6051, C6064, C6070		CEV220M16
	C6072, C6083, C6088		CEV220M16
	C6001, C6004, C6018, C6020, C6045		CEV470M16
	C6059–C6061, C6085, C6208, C6210		CEV470M16
	C6214, C6216		CEV470M16
	C6204		CEV470M6R3
	C6007, C6050, C6053, C6069, C6082		CEV4R7M35
	C6087		CEV4R7M35
	C6046		CEVNP470M6R3
	C6067, C6077		CEVR47M50
	C6002, C6003, C6009–C6012		CKSQYF105Z16
	C6090, C6091, C6212, C6213		CKSQYF105Z16
	C6202		CKSQYF472Z50
	C6075, C6076		CKSRYB332K50
	C6005, C6008, C6021–C6023		CKSRYF103Z50
	C6038–C6040, C6044, C6048		CKSRYF103Z50
	C6054–C6058, C6062, C6063, C6071		CKSRYF103Z50
	C6084, C6089, C6201, C6203		CKSRYF103Z50
	C6205–C6207, C6215		CKSRYF103Z50
	C6019, C6025, C6030, C6035		CKSRYF104Z16

RESISTORS

Mark	No.	Description	Part No.
	R6183		RD1/2LMF1R0J
	R6182		RD1/4LMF3R9J
	R6279, R6296		RS1/16S0R0J
	R6089, R6091, R6106, R6123, R6126		RS1/16S101J
	R6136, R6144, R6147, R6207, R6213		RS1/16S101J
	R6252–R6267, R6269, R6271–R6273		RS1/16S101J
	R6040, R6118, R6130, R6143, R6154		RS1/16S102J
	R6163, R6174, R6201, R6205, R6277		RS1/16S102J
	R6005, R6044, R6105, R6116, R6120		RS1/16S103J
	R6152, R6156, R6161, R6165, R6172		RS1/16S103J
	R6176, R6202, R6209, R6231, R6268		RS1/16S103J
	R6270		RS1/16S103J
	R6004, R6006, R6036, R6043, R6045		RS1/16S104J
	R6114, R6127, R6150, R6159, R6170		RS1/16S104J
	R6221–R6223		RS1/16S104J
	R6054, R6125		RS1/16S152J
	R6087, R6088, R6104, R6276		RS1/16S153J
	R6137, R6139, R6249		RS1/16S183J
	R6011, R6013, R6020–R6026		RS1/16S221J
	R6029–R6033, R6037, R6052, R6053		RS1/16S221J
	R6067, R6074, R6085, R6086, R6094		RS1/16S221J
	R6096, R6115, R6124, R6138		RS1/16S221J
	R6140–R6142, R6145, R6151, R6160		RS1/16S221J
	R6171, R6232, R6241, R6242		RS1/16S221J
	R6009, R6010, R6041, R6050, R6051		RS1/16S222J
	R6075–R6080, R6112, R6113, R6131		RS1/16S222J
	R6146, R6234, R6236		RS1/16S222J
	R6092, R6093, R6098–R6101		RS1/16S223J
	R6121, R6122, R6132–R6135		RS1/16S223J
	R6157, R6158, R6166, R6167		RS1/16S223J
	R6177, R6178, R6204, R6206		RS1/16S223J
	R6210–R6212, R6224–R6227		RS1/16S223J
	R6243–R6246, R6248, R6250, R6251		RS1/16S223J
	R6203		RS1/16S224J
	R6059, R6068, R6095, R6097, R6208		RS1/16S332J
	R6237, R6240		RS1/16S332J
	R6119, R6155, R6164, R6175		RS1/16S472J
	R6184, R6185, R6274		RS1/16S472J
	R6228, R6230, R6247		RS1/16S473J
	R6001, R6002, R6062, R6063		RS1/16S474J

Mark	No.	Description	Part No.
	R6069, R6070, R6179, R6180		RS1/16S474J
	R6034, R6035, R6102, R6103		RS1/16S560J
	R6039, R6117, R6129, R6153, R6162		RS1/16S562J
	R6173		RS1/16S562J
	R6229		RS1/16S563J
	R6012, R6014–R6017, R6019		RS1/16S622J
	R6027, R6028, R6081–R6084		RS1/16S622J
	R6110, R6111		RS1/16S622J
	R6038, R6128		RS1/16S682J
	R6055, R6057, R6189, R6191		RS1/16S683J
	R6018, R6060, R6061, R6064–R6066		RS1/16S750J
	R6071–R6073, R6181, R6186–R6188		RS1/16S750J
	R6215–R6220		RS1/16S750J
	R6048, R6049, R6148, R6149, R6194		RS1/16S821J
	R6233, R6235		RS1/16S821J
	R6056, R6058, R6190, R6192		RS1/16S823J
	R6193		RS1/16S911J
	Other Resistors		RS1/10S☐☐☐J

OTHERS

Mark	No.	Description	Part No.
	CN6001	PINJACK (6P) WITH SIN	AKB1271
	CN6002	PINJACK (6P) WITH SIN	AKB1272
	CN6003	PINJACK (6P)	AKB1273
	CN6203	PINJACK (6P)	AKB1274
	CN6205	PLUG 50–P	AKM1126
	JA6201, JA6206	JACK	AKN1071
	CN6006	L–PLUG (10P)	KM250MA10L
	CN6005	L–PLUG (11P)	KM250MA11L
	CN6007	PLUG 3–P	KM250MA3L
	CN6202	PLUG 3–P	KM250MA3LB
	CN6204	PLUG 3–P	KM250MA3LR